

FINAL ENVIRONMENTAL IMPACT STATEMENT

Deerpark Village Town of Deerpark, Orange County, NY



Applicant: Deerpark Village Associates

Lead Agency: Town of Deerpark Planning Board

February 2012

FINAL ENVIRONMENTAL IMPACT STATEMENT

DEERPARK VILLAGE

Town of Deerpark, Orange County, New York

Lead Agency and Contact Person:

Planning Board of the Town of Deerpark
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Huguenot, NY 12746

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DATE OF ACCEPTANCE: _____ February 8, 2012 _____

CLOSING DATE OF COMMENT PERIOD: _____ March 30, 2012 at 4:00 pm _____

DEERPARK VILLAGE

Final Environmental Impact Statement

Town of Deerpark, New York

February 2012

Mission Statement

The Final Environmental Impact Statement (FEIS) for Deerpark Village in the Town of Deerpark, Orange County, New York has been reviewed and accepted by the Town of Deerpark Planning Board, acting as lead agency for SEQRA review purposes.

The Planning Board has followed the procedures set forth in accordance with the New York State Environmental Quality Review Act (SEQRA) 6NYCRR Part 617. The Planning Board utilized the Draft Environmental Impact Statement (DEIS) and the Supplementary Draft Environmental Impact Statement (SDEIS) and their appendices and incorporates in the FEIS in their entirety by reference.

The Town of Deerpark Planning Board has been designated as Lead Agency. They have followed all the regulations and have looked at alternatives, impacts, mitigations, and all that is required to produce a document that can represent as accurately as possible existing conditions, significant positive and negative project impacts and mitigation proposals of the proposed project.

The Planning Board will continue to act as lead agency in the preparation of a SEQRA findings statement and in the subsequent review of detailed site plans for each development stage of the project for the good of the community it serves.

As Lead Agency, the Planning Board conducted a public hearing and established a period for written comments with respect to the SDEIS. The various resulting comments by the public, public agencies, and the Board's own consultants are included verbatim in Appendices 11 and 12 of the FEIS.

The FEIS provides responses to all substantive comments and, in certain instances, provides additional studies and supplementary text in response to those comments.

A 900 unit alternative and its impacts, representing an approximately 40% reduction from the basic plan as initially presented in the SDEIS, are presented in this FEIS.

The alternative is identified throughout the document within the appropriate sections. The alternate is considered as a mitigation that may reduce negative impacts from those which might otherwise occur.

It is to be further understood by the developer and the public that the FEIS presented is for a Comprehensive Development Plan. Detailed site plans for each project development stage will later be subject to Planning Board review and approval.

The detailed design and individual stages will be presented to the Planning Board as the process continues. At each stage, the impacts of the previous stage will be considered during the review of the subsequent proposed stage.

The detailed site plans will at each stage be required to conform to the approved Comprehensive Development Plan and to any and all State and Federal regulations applicable at that time.

The Planning Board has attempted to identify and mitigate the impacts as presented and will continue its due diligence through the process.

The FEIS has now been accepted as complete and is made available to the public and to involved and interested agencies who are invited to make written comments with respect to the FEIS.

Upon conclusion of the written comment period, the Planning Board will prepare a findings statement which will present the Planning Board's final determination as to the environmental impacts which have been examined and the mitigation which has been proposed.

The findings statement will represent the Board's final decision with respect to the proposal. The findings statement will present the reasons for supporting or denying an action and must be based on the facts and conclusions that are derived from the entire prior SEQRA review record. The findings statement will identify the social and economic, as well as environmental considerations that have been weighed in making a decision to approve or disapprove an action.

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- Appendix 2 Archeological Sensitivity Assessment
- Appendix 3 Rare Plant Survey Report
- Appendix 4 Letter from Bon Secours Hospital
- Appendix 5 Description of Alternating Aerobic/Anaerobic Fixed Film Media Trickle Filter System Sewage Treatment Plant
- Appendix 6 Letters from NYSDEC and USDI
- Appendix 7 Species List
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- Appendix 11 Transcript of Comments at SDEIS Public Hearing
- Appendix 12 Public Written Comments
- Appendix 13 Planning Board Review Consultant and Government Agency Written Comments
- Appendix 14 Revised Analysis of Route 97 Stormwater Culvert, Dated 12//29/08
- Appendix 15 Frequently Asked Questions About Domestic Cats
- Appendix 16 Revisions and Corrections to Deerpark Village SDEIS
- Appendix 17 Full Size Prints of “Land Use Plan, Circulation and Open Space”, “Staging” and “Alternate Plan”

I. SUMMARY/OVERVIEW

A. SCOPE/CONTENTS/BACKGROUND

Scope/Contents

1. This Final Environmental Impact Statement (FEIS) for the approval of a Comprehensive Development Plan for the Deerpark Village project in the Town of Deerpark, Orange County, New York (the Proposed Action) has been prepared in accordance with the regulations of the New York State Environmental Quality Review Act (SEQRA), 6NYCRR part 617.
2. The Draft Environmental Impact Statement (DEIS), the Supplementary Draft Environmental Impact Statement (SDEIS) and their appendices (all further discussed below) are incorporated into this Final Environmental Impact Statement (FEIS) in their entirety by reference.
3. A summary description of the project is found in Section I.B below.
4. In response to certain comments and to update certain analyses a number of supplementary reports have been prepared and are found as follows: Supplementary Traffic Analyses in Section I.C which includes verification of the age and seasonality of the traffic data based on actual traffic counts on July 15, 2009 (page I-13) and Appendix 1 (Traffic Analyses Technical Back-up Documents based on Seasonal Adjustment of Existing Traffic Volumes); a Supplementary Ecology Report in Section I.D (page I-42) and Appendices 3 and 7 (Rare Plant Survey Report and Species List); a report and data on Water Quality can be found in Section I.G (page I-70); a description of the Sewage Treatment Plant currently proposed (replacing the type of plant described in the SDEIS) is found in Section I.H (page I-75) and Appendix 5 (Description of Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter System Sewage Treatment Plant); an Archeological Sensitivity Assessment is found in Appendix 2; a Supplementary Visual Impact Analysis is found in Appendix 8; a revised analysis of a Route 97

stormwater culvert is found in Appendix 14; Supplementary Traffic Accident information is found in Tables I-2 through I-6 (pages I-32 and I-33).

None of these supplementary studies found any significant adverse impacts beyond those identified in the SDEIS. Thus, with the exception of certain minor adjustments and clarifications, the basic Comprehensive Development Plan remains unchanged from that which was presented in the SDEIS.

This FEIS describes a different type of package sewer plant replacing at the same general location the plant previously described in the DEIS.

5. Certain minor adjustments, and clarifications of proposals have been made as a result of comments and questions. The two revised plan drawings can be found in Section I.E (pages I- to I-); they are “Land Use Plan, Circulation and Open Space” and “Staging”.
6. A number of Mitigation Measures are described in each section of the SDEIS and in response to certain comments in this FEIS.

The Planning Board has identified project impacts which were studied in the DEIS, SDEIS and in response to comments. The following is a list of the mitigation to those impacts and the page numbers in this FEIS – Section I-F – of the mitigation measures to assist the reader in reviewing the document:

1.	Impact of Change in Land Use	I-58
2.	Impact of Soil Disturbance/Alteration in Topography	I-59
3.	Impact of Increased Stormwater Runoff Due to Increase in Impervious Surfaces	I-60
4.	Preservation of Open Space and Wetlands	I-60
5.	Impact of Loss of Plant and Wildlife Habitat.....	I-61
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14.	Van Shuttle Service	I-67
15.	Impact of Increase in Population Leading to Some Increase ⁸ in Demand for Municipal and Community Services	I-68
16.	Impact on Air Quality	I-69
17.	Off-Site Mitigation: Culvert Under Route 97	I-69
18.	Impact of Construction Activities	I-70
19.	Archeology Studies	I-74

7. In response to comments with concerns about the availability of necessary services, letters indicating the adequacy and availability of these services are found in: Appendix 4, Bon Secours Hospital; Appendix 9, Ambulance Corps; Appendix 10, Orange and Rockland Utilities.

8. A transcript of public comments made at the SDEIS public hearing is found in Appendix 11, and copies of all written public comments received during the public comment period are found in Appendix 12; comment reference numbers can be found in the margin of the transcript and letters. These reference numbers are shown in parenthesis below the brief summary description of the comments in the comment response section (FEIS Section II.A)(page II-1).

9. The responses to the public comments are grouped by subject with, in each case, a brief summary of the various comments on the particular subject. Below each brief summary there is a notation which identifies the verbatim comments covered by the summary.

The responses to the public comments at the public hearing and the written comments are found in Section II.A (page II-1).

10. A copy of the extensive comments from the Planning Board's review consultant, and written comments from governmental agencies, are found in Appendix 13.

The cross-referenced responses are found in Section II-B (page II-74) titled Responses to Comments of Planning Board Consultants and Governmental Agencies.

Background

11. The zoning ordinance which permits the planned residential development, which is the subject of this review, was established in accordance with the order of New York State Supreme Court Justice Peter Patsolos issued on December 13, 1991. Subsequently, on August 31, 1992 the Town of Deerpark, after preparing and reviewing a Generic Environmental Impact Statement, amended the Town Zoning Ordinance to include a Planned Residential Retirement District (PRRD) and amended the Town Zoning Map to include the subject property in that district.

12. On January 24, 1996, a Draft Environmental Impact Statement was found by the Planning Board to be complete and was the subject of a public hearing on April 10, 1996. In response to some of the public hearing comments, which suggested that the property should remain as a permanent open space, the developer initiated negotiations with the New York State Department of Environmental Conservation (DEC) with respect to their possible interest in purchasing the property and dedicating it for permanent open space use. The Town Board indicated its support of that proposal. The developer and DEC were unable to reach a mutually acceptable agreement for the purchase and on April 1, 2003 the developer informed the DEC, the Town Board and Town Planning Board that no further negotiations were to take place and that the developer intended to continue processing the Development Plan for approval under the provisions of the PRRD Zone (see Appendix E of the SDEIS, letter dated 4/1/03 from Joel H. Sachs, Esq. to Erin Crotty, Commissioner, NYSDEC).

13. Because of the lapse of time, the Planning Board requested that the developer submit a Supplementary DEIS which would update data as to existing conditions and impacts, and include text and analysis which would address substantive comments that were transmitted during the initial DEIS public hearing process.
14. On August 7, 2006 the Town Board adopted Local Law No. 4 of 2006, which affirmed the inclusion of the PRRD in the Zoning Ordinance and the mapping of the PRRD for the subject site. (See Appendix F of the SDEIS – Local Law No. 4 of 2006 and Local Law No. 3 of 2006)
15. The action which is evaluated in the EIS is the approval by the Planning Board of a Development Plan (also referred to as Comprehensive Development Plan) prepared in accordance with the requirements of Section 230-21.1, Subsection (e)2.b (Application Procedure, Phase 2, PRC or PRRC Development Plan) of the Planned Residential Retirement District (PRRD) of the Town of Deerpark zoning law.
16. This Comprehensive Development Plan has been prepared in accordance with the requirements of Section 230-21.1, Chapter 230 of the Deerpark Town Code, Subsection 2(d)2, Phase 2,b., titled PRC or PRRC Development Plan. This subsection establishes the information which is required to be submitted. Basically, the information to be supplied is: Ownership, Neighboring Uses, Topography, Features, Circulation, Land Use Plan, Utilities and Services, Applicant and Owner. The information is to be provided at a scale of not greater than one (1) inch equals two hundred (200) feet. These maps in large size are available for inspection at the Deerpark Town Hall, and the Comprehensive Development Plan was reduced as exhibits in the SDEIS volume. The FEIS contains certain maps which are slightly revised from those shown in the SDEIS.
17. The Comprehensive Development Plan, at a scale of 1" = 200', is not at the same level of detail as a site plan or subdivision plan which are normally reviewed by the Planning Board. Rather, it is a plan which sets forth the basic concepts of the proposal, its scale, the manner in which its infrastructure will serve the development, an outline of the areas

to be developed and those, such as wetlands, which are not to be disturbed. The plan details will be forthcoming on site plans submitted to the Planning Board for review after the SEQRA process for the Comprehensive Development Plan has been completed.

After approval of the Comprehensive Development Plan, no development can take place unless there is a next stage of approval of a detailed site plan or subdivision plan.

Section 230-21.1 in a Section of the Deerpark Town Code, headed “3. Phase 3 Detailed Site Plan Approval of PRC or PRRC Sections by the Planning Board”, sets forth the requirements for the review of site plans for each development stage, and also the possible need for subdivision review. It establishes that these reviews would be accompanied by a SEQRA review, as necessary. It establishes that, for each section of a PRRC, there shall be “...a detailed review of the adequacy, location, arrangement, design and appearance of each aspect of development listed in the Application Procedure” (underlining added). The review required is in accordance with the level of detail and information to be supplied which is established in the Town’s site plan and subdivision review codes. Normally these codes require submission of maps at a scale of one inch equals 40 feet to one inch equals 60 feet.

In a subsection of the immediately above referenced Section 230-21.1 titled “f. Variance from PRC or PRRC Development Plan”, it is established that the subsequent site plan and subdivision plans cannot exceed the total number of units permitted by the entire Comprehensive Development Plan. It also provides that any revisions in detail to the configuration of open space and internal circulation cannot affect more than 15% of the area of the site and the access points to off-site roads cannot be altered by more than 50 feet.

It is noted that a number of those who commented did not recognize the distinction between the level of detail and information to be presented in the overall Comprehensive Development Plan, as against the far greater level of detail and information which will be

required to be submitted in support of a site plan or subdivision plan for each development stage.

18. Each site plan submission will, among other data and plan items, include the following:

- Typical building footprint, walks and connections to parking and trails.
- Proposed landscaping and buffering treatments between homes.
- Plans to scale showing widths and surface treatment of streets, walks and paths and other illustrative material as necessary to present intended design objectives.
- Proposed buffering and screening treatments of water tank, water treatment facility and maintenance buildings.
- Landscape buffer treatments in area when proposed structures or parking areas are within close proximity to off-site developed residential areas.
- The initial site plan submission for each major section shall, particularly for access roads, show roadway geometry, layout, widths and center-line grades, and a cross-section of surface treatments.
- Control measures for emergency access to Old Cochection Turnpike and wetland crossing, and surface treatment for wetland crossing area.
- Each site plan submission shall include sketches or photos of the architectural style to be utilized for the homes in that stage of development, and for the retail development at the stage when its construction is presented for site plan approval.
- For the proposed entry “gatehouses”, the first site plan submission for each major section, shall include the security guidelines to be implemented for vehicle and pedestrian access.
- The evaluation of impacts of previous stages.

19. After review of several draft submissions of the SDEIS, the document was found by the Planning Board to be complete on June 13, 2007 and a copy was transmitted to involved agencies. The document was also placed on the Town’s web site.

20. A public hearing on the SDEIS was held on July 25, 2007.

21. The Planning Board established a period for receipt of written comments until September 27, 2007.
22. A draft of the FEIS was submitted by the Applicant on March 3, 2009.
23. After careful review by the Planning Board's review consultant, Al Fusco, PE, and the members of the Planning Board, the Planning Board found the FEIS to be complete on February 8, 2012, and authorized its issuance to involved and interested agencies and its placement on the Town's web site.
24. The Planning Board has established a period of 30 days for the receipt of written comments with respect to the FEIS.

B. PROJECT DESCRIPTION

Deerpark Village is proposed as a 1,518 unit Planned Residential Retirement Community to be located on an approximately 243 acre site off Wilson Road west of its intersection with Route 42 in the Town of Deerpark. The development will provide attractive townhouse-style homes averaging two bedrooms in size, for retired persons and other households over 55 years of age.

Occupancy and ownership will be limited to households with persons 55 years and over, a spouse and/or child over age 19, and/or an aide or other medical assistant. Deerpark Village residents are expected to come from the western portions of Orange County, New York as well as from surrounding areas in New York, New Jersey and Pennsylvania. As part of the development, recreational amenities will be constructed to provide opportunities for an active life style for older citizens. Deerpark Village has been designed to be compatible with the natural features of the property and uses surrounding the site and is consistent with the Town's current zoning law and map. No variances or waivers from any applicable regulation are being requested.

Following the stated intent of the Planned Residential Retirement District (PRRD) in the Deerpark zoning law, the plan proposes construction of "age-oriented and planned community housing for older residents...cluster forms of housing thereby increasing the proportion of townhouse and multifamily forms of dwelling units within the Town." The development program for the site includes 1,518 dwelling units, recreational amenities as described below, and a 50,000 square foot retail shopping center intended primarily to service the daily food and services needs of the development residents.

Two access roads off Wilson Road plus one emergency access off Cochection Turnpike will provide ingress and egress to the community, and a system of internal roadways will provide smooth flowing circulation within the property.

The development will be serviced by its own water system with water provided from a subsurface aquifer. Sanitary sewage will be treated in an on-site state of the art treatment

facility. These facilities will be installed and paid for by the applicant and later operated and maintained by a homeowners association or a condominium corporation. Thus, there will be no costs to the Town of Deerpark or any other governmental agency for the construction, operation and maintenance of those facilities.

Similarly, all internal roads, driveways, water, sanitary sewer, storm drainage, telephone, cable and electric systems are to be installed by the developer, or where applicable by a private utility company. Repair, replacement, snow plowing will be the responsibility of a homeowners association or a condominium corporation, or the applicable private utility. There will be no costs to any municipal body for the construction, maintenance, operation or replacement of these facilities.

The development will maintain a security system that will involve both technology and personnel. As the development's occupancy increases, the size and manpower coverage and equipment will be increased proportionately.

Both active and passive recreation areas will be developed to provide residents with opportunities to enjoy the natural and enhanced beauty of the site and surrounding areas. Onsite recreation facilities will include a community club, swimming pool, tennis courts, and other recreation uses such as, but not necessarily limited to, bocci and racquet ball courts, horseshoe pits and sitting areas. In addition, hiking/jogging paths will traverse the site. Thus, the impacts on existing Town facilities will be minimal.

With the exception of a 0.23 acre disturbance for an emergency access road crossing to connect the southern and northern sections of the site, the 32.37 acres of wetlands on the site will be preserved and provided with a 100 foot buffer within which no development will occur. Detailed data relating to wetlands disturbance permits that may be required from any governmental agency will be included as part of the permit approval processes for the various stages of the project as they are submitted for site plan approval in each stage. If permits are not issued alternate access and site plan changes may be required for site plan approval.

Disturbance of steep slope areas will be avoided, to the maximum extent feasible. Thus, the important natural features of the site will be maintained and protected.

On-site detention facilities will be provided in order to attenuate the discharge of stormwater from the property, so that the rate of runoff from the site will be the same or lower after development as it is under existing conditions, and to protect water quality as required by New York State Department of Environmental Conservation standards.

An extensive detailed mitigation plan is to be provided in order to minimize construction stage impacts.

The development will not require any governmental grants or other subsidies. It will not require any property tax abatements. It is currently estimated that, when completed, in terms of 2004/2005 tax year dollars, the development will produce annual property tax revenues of \$7,986,700 to all local taxing jurisdictions, \$5,902,200 of which will be revenues to the School District. Because of the occupancy restrictions to senior citizens, there are no anticipated cost impacts to the School District.

It is impractical in the current economy to predict when total build-out could occur. Fusco Engineering, the Planning Board's Consultant, suggests that, for a practical approach to estimating how these annual tax revenues will grow, a two-year approval/financing period and a total 10-year period should be assumed to full build-out. The annual tax revenues from the project are projected as follows:

<u>Year</u>	<u>Local Non-School Property Taxes</u>	<u>School Property Taxes</u>	<u>Total Property Taxes</u>
2012	\$ 234,900	\$ 665,100	\$ 900,000
2013	466,100	1,319,700	1,785,800
2014	697,300	1,974,300	2,671,600
2015	928,500	2,628,900	3,557,400
2016	1,159,700	3,283,500	4,443,200
2017	1,390,800	3,938,200	5,329,000
2018	1,622,000	4,592,800	6,214,800
2019	1,853,200	5,247,400	7,100,600
2020	2,084,500	5,902,200	7,986,700

The applicant's planning consultant, Parish & Weiner, Inc., has noted that these figures are in current dollars and that they will inevitably vary based on national and regional economic factors. Also, the consultants note that while the EIS examines total impacts, these will also be experienced in similar gradual stages.

C. SUPPLEMENTARY TRAFFIC ANALYSES

These supplementary analyses have been prepared in response to comments regarding the SDEIS traffic analyses.

1. TRAFFIC COUNT AGE AND SEASONALITY

The traffic counts for the SDEIS were made in April 2004. At the time that the SDEIS was submitted to the Town, these counts were current. In order to determine whether the 2004 traffic count volumes were still representative of 2008 conditions, new traffic counts were made on Tuesday, March 11, 2008, from 7:00 to 9:00 A.M. and from 3:30 to 6:30 P.M. at the intersections of Route 42 with Route 97 and Route 42 with Wilson Road. The peak hour counts, along with the April 2004 counts for comparison, are shown on the accompanying table and traffic diagrams on the immediately following pages.

A comparison of the two set of traffic counts shows very little change from 2004 to 2008. Traffic volumes on Route 97 increased slightly, while traffic volumes on Route 42 and on Wilson Road decreased slightly. Traffic volumes on the combined section of Routes 42 and 97 remained essentially unchanged. Both sets are one-day counts, and the differences could fall within normal day-to-day variations.

It should be noted that an annual background traffic growth rate of one percent (a frequently used growth rate in traffic analysis) was used in the SDEIS. Thus, in comparing the two sets of traffic counts, the 2004 counts should in theory be increased by four percent. This would result in a smaller increase in traffic on Route 97 and a larger decrease in traffic on Route 42 and on Wilson Road, and thus indicates that there has not been a significant increase in any of the traffic volumes since 2004. In fact, substituting the 2008 counts for the 2004 counts would result in a slight decrease in the volume/capacity ratios and average vehicle delay times at both of these intersections, although the Levels of Service probably would not change.

In terms of seasonal variations in peak hour traffic volumes, which are heavily influenced by commuter work trips, it is not expected that there would any significant difference between counts made in March and counts made in April.

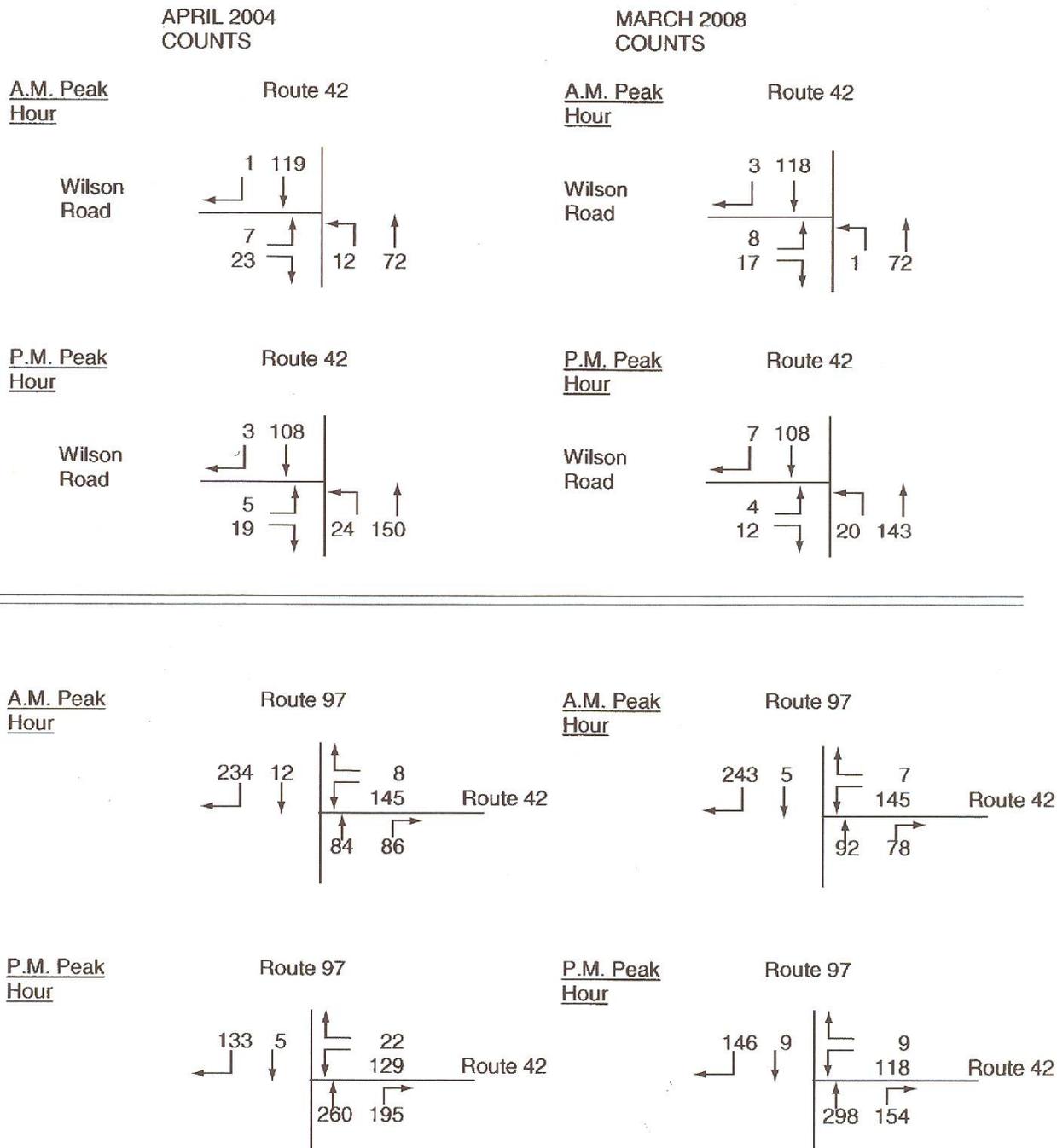
On the basis of the new counts and the above assessment, it can be established that the 2004 traffic counts used in the SDEIS are still applicable.

Table I-1**COMPARISON OF 2004 AND 2008 TURNING MOVEMENT COUNTS**

	<u>Apr-04</u>	<u>Mar-08</u>	<u>Change</u>	<u>Percent</u>	<u>Apr-04</u>	<u>Mar-08</u>	<u>Change</u>	<u>Percent</u>
	<u>A.M. Peak Hour</u>			<u>Change</u>	<u>P.M. Peak Hour</u>			<u>Change</u>
<u>Route 42 and Route 97</u>								
Northbound Through	84	92	8		260	298	38	
Northbound Right Turn	86	78	-8		195	154	-41	
Southbound Through	234	243	9		133	146	13	
Southbound Left Turn	12	5	-7		5	9	4	
Westbound Left Turn	145	145	0		129	118	-11	
Westbound Right Turn	8	7	-1		22	9	-13	
	569	570	1	0%	744	734	-10	-1%
<u>Route 42 North of Intersection</u>								
Northbound	98	83	-15		200	163	-37	
Southbound	153	152	-1		151	127	-24	
Total	251	235	-16	-6%	351	290	-61	-17%
<u>Route 42/97 South of Intersection</u>								
Northbound	170	170	0		455	452	-3	
Southbound	379	388	9		262	264	2	
Total	549	558	9	2%	717	716	-1	0%
<u>Route 97 North of Intersection</u>								
Northbound	92	99	7		282	307	25	
Southbound	246	248	2		138	155	17	
Total	338	347	9	3%	420	462	42	10%
<u>Route 42 and Wilson Road</u>								
Northbound Through	72	72	0		150	143	-7	
Northbound Left Turn	12	1	-11		24	20	-4	
Southbound Through	119	118	-1		108	108	0	
Southbound Right Turn	1	3	2		3	7	4	
Eastbound Left Turn	7	8	1		5	4	-1	
Eastbound Right Turn	25	17	-8		19	12	-7	
	236	219	-17	-7%	309	294	-15	-5%
<u>Route 42 North of Intersection</u>								
Northbound	79	80	1		155	147	-8	
Southbound	120	121	1		111	115	4	
Total	199	201	2	1%	266	262	-4	-2%
<u>Route 42 South of Intersection</u>								
Northbound	84	73	-11		174	163	-11	
Southbound	126	126	0		113	112	-1	
Total	210	199	-11	-5%	287	275	-12	-4%
<u>Wilson Road West of Intersection</u>								
Eastbound	32	25	-7		24	16	-8	
Westbound	13	4	-9		27	27	0	
Total	45	29	-16	-36%	51	43	-8	-16%

Figure I-1

TRAFFIC COUNT COMPARISON



The comment is made in Comment Letter F submitted by the Wilson Road Coalition (see Appendix 12, page 46) that “The methodology, particularly with respect to existing conditions on Routes 42 and 97 also did not account for the seasonality of traffic associated with the Scenic River Corridor and the resulting increased traffic associated with summer tourism in the region.”

The traffic analysis in the SDEIS is based on average traffic conditions. April is generally considered to be an “average” month for traffic volumes, and a good time to make counts.

In order to test the traffic conditions for a seasonal peak, a simulation of traffic counts in the summer season has been undertaken, based on traffic count material furnished by the New York State Department of Transportation. NYSDOT publishes a general set of Work Week (Week Day) Seasonal Adjustment Factors for Traffic Count Processing, the latest ones in 2006, but these are applicable only to daily (24 hour) traffic volumes, and we have previously been advised by NYSDOT not to use them for hourly traffic adjustments. NYSDOT also has a series of permanent counting stations across the State, which record traffic volumes continuously by hour and day. We made a request to NYSDOT for continuous count records for Routes 42 or 97 in the Orange County area. NYSDOT had no counts on these routes, but sent instead the continuous count results from a location on CR 53 in the Town of Fallsburg in Sullivan County. The applicability of these data is questionable. This has been augmented by an actual traffic count (see discussion at conclusion of this section). The Town of Fallsburg is in a very seasonal area, as is the Route 97 corridor, but it is reflective of the summer cottage residents, primarily Orthodox Jewish communities. However, in order to develop a seasonal traffic for the Route 97 corridor, and because these are the only data available, they have been used in developing this seasonal simulation. The use of this seasonal simulation was validated by updated traffic counts conducted on July 15, 2009. Those counts are discussed at the conclusion of this section. The 7/15/09 counts are actually lower than the assumed counts which were based on the CR-53 station counts. Thus, the use of the

CR-53 station counts in the analysis result in greater protection of the environment (i.e. a more conservative assumption of impacts) than the use of the 7/15/09 counts.

The CR 53 station counts showed that the July weekday A.M. peak hour volumes were 7 percent higher than the April volumes, while the July P.M. peak hour volumes were 33 percent higher than the April volumes. Given these percentages, the seasonal analysis concentrated on the P.M. peak hour. The Route 97 count volumes, therefore, were increased by 33 percent.

Route 42, however, has a different character. While it does handle a significant amount of seasonal traffic, it also is a multi-functional road, handling everyday commuter, business and other everyday traffic. For this simulation, therefore, a seasonal increase equal to one-half of the Route 97 seasonal increase, or 16.5 percent, was applied to the Route 42 traffic volumes.

Local traffic on Wilson Road, except at the intersections with Route 42 and Route 97, is not expected to be affected by seasonal variations.

Using these seasonal adjustment factors, the A.M. and P.M. peak hour traffic volumes were expanded to peak seasonal volumes. (Note that the truck percentages recorded in the March 2008 traffic counts were applied in these analyses.) The resultant 2004 Existing condition volumes, the site-generated volumes and the projected 2015, 2020 and 2025 No-Build and Build traffic volumes are shown in Figures S-1 to S-16 in FEIS Appendix 1 (pages 6 to 22).

Capacity analyses for these conditions were run for the intersections of Wilson Road with Route 42 and with Route 97, and for the intersection of Routes 42 and 97. The results of these unsignalized intersection capacity analyses are summarized in Table S-1, S-2 and S-3 which can be found in FEIS Appendix 1 (pages 2 to 4). The capacity calculation worksheets are also included in Appendix 1 (pages 23 to 69). These results show that all three intersections now operate and will continue to operate at Level of

Service C or better during both the A.M. and P.M. peak hours, except for the Build condition in the P.M. peak hour at the intersection of Routes 42 and 97, where the westbound Route 42 approach is projected to operate at Level of Service E in 2015 and 2020, and at Level of Service F in 2025.

In order to maintain a traffic operations level of Level of Service D or better for all lane groups, mitigation measures would have to be applied to the intersection of Routes 42 and 97. The following two mitigation measures have been considered.

- The first would involve constructing an additional approach lane on the Route 42 approach, providing both left turn and right turn lanes on Route 42. This measure would provide some small improvement in traffic operations; however, the cost of this improvement is not justified by the minimal improvement in the operating levels.
- A much more effective measure would be to install a traffic signal at the intersection. Capacity analyses with a fully actuated traffic signal installed were run for the 2015, 2020 and 2025 Build conditions. The results of these analyses, summarized in Table S-4 (see Appendix 1, page 5), show that the overall intersection and all lane groups will operate at Level of Service B or better for all three years in both the A.M. and P.M. peak hours. A traffic signal, therefore, is the obvious mitigation measure to be employed.

Given these findings, the Applicant has agreed to install the traffic signal after 80% of the 1,518 units are completed (i.e. when 1,214 units are completed), and at the earliest of the following two criteria: when an updated traffic study for a subsequent stage would show a level of service E or F, subject to New York State Department of Transportation (“NYSDOT”) approval and meeting the signal warrants established in the Manual of Uniform Traffic Control Devices; or at any subsequent period when NYSDOT approval is obtained. At the time of site plan approval for the stage at which installation of a traffic signal is required, the developer shall post a performance bond in accordance with the provisions of the regulations governing development in the Planning Residential

Retirement District as noted in the Town of Deerpark Local Law Number 3 of 2006, Section 2.(e)3.j, which is designated as “Performance Bond”.

A traffic signal, however, cannot be immediately installed. The intersection of two State highways is under the jurisdiction of the New York State Department of Transportation, and NYSDOT normally will not consider signalization based on a long-range projection, but would monitor the intersection to determine if and when the intersection required signalization. This could be done by the scheduled follow-up traffic analyses to be undertaken by the Applicant, but in order to get some sort of an idea of its timing, analyses of the Route 42/Route 97 intersection were performed. For these analyses two conditions were considered; the P.M. peak hour Existing traffic volumes and the 2015 Build condition volumes, with the growth to 2015 consisting of the annual background traffic increase, the traffic generated by other developments along Wilson Road and the full development of both the residential and the retail components of Deerpark Village. Capacity analyses were then run at different percentages of this growth. These analyses determined that at 80 percent of the growth the intersection lane groups all would operate at Level of Service D or better, but any additional growth beyond this 80 percent level would move the Route 42 approach into the Level of Service E range. Note that similar analyses were not done for the A.M. peak hour because, as shown in Figures S-1 to S-16 (see Appendix 1 (pages 6 to 22), A.M. traffic volumes were lower than P.M. traffic volumes.

Back-up traffic diagrams, capacity worksheets and other supporting material for these analyses are included in Appendix 1 (pages 70 to 79).

Summer Season Counts, July 15, 2009

At several meetings subsequent to the Town’s receipt of the draft FEIS dated February 2009, some members of the Planning Board, as well as the Board’s review consultant, Alfred A. Fusco, Jr., PE, raised a question about the validity of the analytical method used in the draft FEIS to arrive at assumed summer season traffic volumes. As previously noted, the analysis was undertaken in response to a comment during the

SDEIS public review period and the methodology was presented in the first draft of the FEIS. The first draft FEIS was in preparation during a non-summer period so it was not possible at that time to take actual counts for comparison purposes.

In order to respond to the Board’s question and concern about the validity of the methodology during its review of the first FEIS draft, Parish & Weiner commissioned a summer 2009 survey for the heaviest volume intersection, Routes 42/97.

The new traffic count at the intersection of Route 42 and 97 was made on Wednesday, July 15, 2009 from 7:00 to 9:00 AM and from 3:30 to 6:30 PM. The peak hours were determined to be 8:00 – 9:00 AM and 4:15 – 5:15 PM. The resultant peak hour volumes are shown in the top two diagrams of Figure I-2 on the immediately following page.

The two diagrams at the bottom of Figure I-2 show the peak hour volumes that were utilized in the summer season analyses in the draft FEIS.

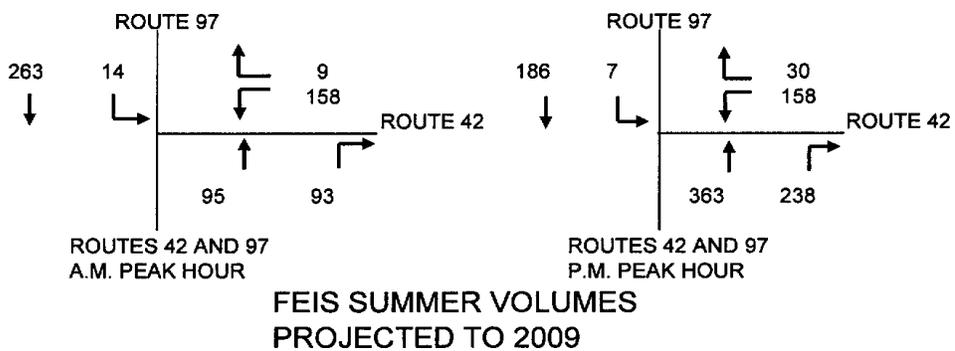
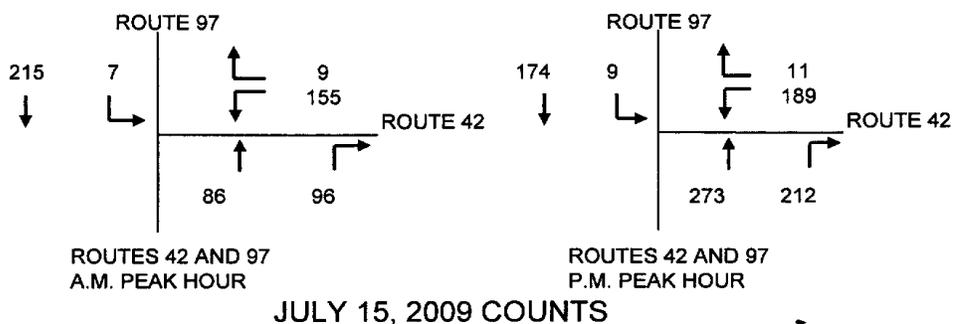
For the total volume at the intersection, the following tabulation compares the calculated traffic volume used in the FEIS with the actual traffic volumes counted on July 15, 2009.

	FEIS Calculated Volume	July 15, 2009 Traffic Count	Volume	% Difference
AM Peak Hour	632	568		-10%
PM Peak Hour	982	868		-12%

Thus, the actual traffic counts are lower than those which were calculated in the draft FEIS and used in the analysis. This sensitivity analysis establishes that the assumptions were used in the FEIS analysis were valid and, in fact, projected larger impacts, than can be expected. It is also noted that the 900 unit development alternative would reduce traffic generation by about 40%.

Figure I-2

Traffic Count Comparison



2. PROJECT TRAFFIC GENERATION NOT UNDERESTIMATED

The estimates of traffic to be generated by Deerpark Village in the SDEIS are based on trip generation rates developed and published by the Institute of Transportation Engineers¹. In the comments on the SDEIS it is contended that trip generation rates from a study made in Delaware, dated April 2006², should have been used instead. This contention is challenged.

The ITE trip generation rates have been a standard for the traffic engineering field for a long time. This reference, which is now in its seventh edition (updated six times) is used for virtually all Traffic Impact Studies, including those made throughout Orange County. The trip generation rates are based on actual counts made at a number of similar developments throughout the country. This reference is recognized and accepted by the New York State Department of Transportation, and in fact NYSDOT has required its use in a number of traffic studies. This use is even acknowledged on page 5 of the Delaware Study, with the statement “The most referenced and used data for trip generation comes from the Institute of Transportation Engineers Trip Generation Report that reference two categories that would correspond to 55+ restricted communities” .

By contrast, the Delaware Study is an academic exercise, developing the rates from data other than actual counts, and deriving theoretical rates. In fact, the study has no official standing, even in the State of Delaware. A note on the cover sheet of the report states that “The contents do not necessarily reflect the official views of the Delaware Center for Transportation or the Delaware Department of Transportation. This report does not constitute a standard, specification, or regulation.”

The justification, in the SDEIS comments, for the use of the Delaware rates, is that the Delaware study, with a publication year of 2006, is based on newer, more up-to-date data than is the ITE study, which was published in 2003. A careful examination of the Delaware Study, however, does not support this contention. The Review of Available

¹ “Trip Generation”, 7th Edition, Institute of Transportation Engineers, Washington, D.C. 2003

² “Active Adult (55+) Community Trip generation Rates”, Delaware Center for Transportation, University of Delaware, April 2006

Trip Generation and Traffic Impact Data section of the Study reports results from various studies with publication dates between 1998 and 2002. The study analysis uses data from the Delaware Trip monitoring System (DTMS), which includes data collected from 1995 to the present, and from the 1995 Nationwide Personal Transportation Survey. The Delaware Study has a newer publication date than the ITE reference, but it does not appear that the data are any newer. In the Conclusions section of Comment Letter F submitted by the Wilson Road Coalition (see Appendix 12, page 59), the references to “outdated sources” on page 53 of Appendix 12, last paragraph, and “more recent data” on page 54, last paragraph (second bullet), also should be considered as unsupported and incorrect.

There are, in addition, other reasons why the Delaware Study results should not be applied to this particular proposed development.

- a. The Delaware trip generation rates are average rates for all developments. It has been long established that, for many types of development, including residential, retail and office, the unit trip generation rates (trips per dwelling unit, trips per 1000 square feet, etc.) decrease as the development size increases. There is no variable in the Delaware Study rate to account for the size of the development. The regression equation used by ITE shows a definite size/rate variation. For example, the A.M. peak hour rate for the Deerpark development, 1,518 DU, calculates at 0.19 trips/DU. For a smaller development, say 200 DU, the rate would be 0.26, which is not far from the Delaware rate of 0.28 trips/DU. An even more pronounced size/rate variation occurs in the ITE P.M. peak hour regression equation, although the statistical correlation is not as good. In fact, the Delaware report, in its Figures 5 and 6, also shows similar size/rate variation, although here too the statistical correlation is not as good. If the Delaware study had considered the size of the development, which it did not do, the rate, applied to the Deerpark size, would have been a lot closer to the ITE rate which was used.

b. The Delaware trip generation rates are average rates that do not consider the location of the development. Many people in the 55-64 age group living in age-restricted housing are still employed; the Delaware study, in Figure 21, reports 39 percent of this age group as being employed. Employment, however, is related to employment opportunities. In an urban area there are extensive employment opportunities, but as one moves away from these centers the employment opportunities decrease. In the Deerpark area there are very limited employment opportunities within a reasonable commuting distance for older workers (particularly the ones who would be able to afford this type of housing), many of whom could be expected to have had professional-level jobs. People moving into Deerpark Village, therefore, are more likely to be retirees, for whom the employment opportunities are not a consideration. This would further lower the peak hour trip generation rates, although not necessarily the 24-hour rates.

These factors are recognized by both references. The Delaware report states, on page 11, "Of course, factors such as employment status, the availability of a car, and others affect the number of trips a person will take each day." On page 12 it states "Labor market activity has an immediate impact since work trips are going to be required." ITE is even more specific, stating "Factors such as average age of residents, development location and size (underlining not in original quote), affluence of residents, employment status and vehicular access should be taken into consideration when conducting an analysis". ITE rates factor in development size, the Delaware rates do not, but both ITE and Delaware use overall average conditions for the other factors. Considering location, both the ITE and Delaware rates might be high when applied to the specific location of Deerpark Village. Changing economic conditions can affect retirement ages, and thus the age 55 and up population would work longer causing higher rates to be experienced. If it occurs, this would be taken into account by the Planning Board as it reviews each site plan stage. At the time the SDEIS was being prepared, the only project that was identified which fit into this category was a 21 unit subdivision proposed by a developer for a site along Wilson Road. The "no build" traffic analysis indicates the traffic from this proposal.

3. STOPPING DISTANCE SAFETY

Concerns are raised on pages 35 and 36 of Comment Letter F submitted by the Wilson Road Coalition (see Appendix 12, pages 50 and 51) concerning safety conditions on Route 42 and at its intersection with Wilson Road, with particular emphasis on the adequacy of the sight distances. The SDEIS included a theoretical assessment of these sight distances based on a time gap analysis. This analysis apparently created some confusion with some reviewers and is further discussed below.

In order to more firmly establish the existing sight distances the actual sight lines were measured in the field on Wednesday, April 16, 2008. The AASHTO Policy considers two types of sight distances.

Stopping Sight Distance – The length of the roadway ahead that is continuously visible to the driver in order to allow the driver to stop

Intersection Sight Distance – The length of the roadway visible from a vehicle on a side road to allow the vehicle to safely enter the main road.

Stopping Sight Distance. The important stopping sight distance at this intersection is for drivers traveling north on Route 42 being able to see vehicles stopped while waiting to make the left turn into Wilson Road. For this condition the following AASHTO design guidelines would apply.

<u>Design Speed in MPH</u>	<u>Stopping Sight Distance</u> In Feet
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730

Note that because Route 42 is on an upgrade at this road section these sight distances could be slightly reduced.

The stopping sight distance at this location was measured at about 800 feet to the intersection with Wilson Road. Thus, even allowing for a queue of vehicles waiting to make the left turn, say three cars at 22 foot spacing or 66 feet, the stopping sight distance is sufficient for vehicles traveling up to 70 MPH on Route 42.

Intersection Sight Distance. The important intersection sight distance is the distance from the vehicle waiting to turn left from Wilson Road onto Route 42 to a vehicle approaching on Route 42. This distance was measured from Wilson Road in both directions along Route 42, from the elevation of the driver's eye, 3.5 feet above the pavement and 10 feet in back of the edge of pavement of the main road to the center of the main road lanes.

For this condition the following AASHTO design guidelines would apply.

<u>Design Speed in MPH</u>	<u>Intersection Sight Distance In Feet</u>
30	335
35	390
40	445
45	500
50	555
55	610
60	665
65	720
70	775

The intersection sight distance from Wilson Road along Route 42 was measured at about 900 feet, both to the left (north) and to the right (south). This exceeds the intersection sight distance guidelines for vehicles traveling up to 70 MPH on Route 42.

In addition to the intersection of Route 42 and Wilson Road, similar sight distance measurements also were made for the intersections of Route 42 with Route 97 and Route 97 with Wilson Road.

Route 42 and Route 97. This intersection is in a wide open area. The stopping sight distances and intersection sight distances all were measured as in excess of 900 feet, more than sufficient for speeds even exceeding 70 MPH.

Route 97 and Wilson Road. Because of the alignment of Route 97, sight distances were more limited at this intersection than they were at the other two intersections. The stopping sight distance was measured at 450 feet, sufficient for vehicles traveling at 50 MPH on Route 97. The intersection sight distances were measured at 600 feet to the left (east) and 550 feet to the right (west), also sufficient for vehicles traveling at 50 MPH, the prevailing speed, on Route 97. Considering the operating conditions on Route 97 this should be sufficient. It should be noted, however, that very little traffic generated by Deerpark Village is expected to pass through this intersection, and virtually all of it is to and from the retail area.

The purpose and usage of the AASHTO guidelines also needs to be better understood. The referenced AASHTO publication, “A Policy on Geometric Design of Highways and Streets”, published by the American Association of State Highway and Transportation Officials, is, as its name suggests, a design manual. Its purpose is to provide guidelines for the design and construction of new road facilities. This is even noted in the comment of the Wilson Road Coalition found in their comment letter included in Appendix 12 (see page 51), where reference is made, in the second paragraph, to “recommended stopping sight distance for design,” and in the inclusion of Table 2 (on page 51 of Appendix 12) with the title “Design Values for Stopping Sight Distance.”

The AASHTO guidelines are specifically not intended to apply to existing roads. This is clearly stated in the Introduction to the publication, the full applicable paragraph of which is as follows.

“The fact that new design values are presented herein does not imply that existing streets and highways are unsafe, nor does it mandate the initiation of improvement projects. This publication is not intended as a policy for resurfacing, restoration, or rehabilitation (3R) projects. For projects of this type, where major revisions to horizontal or vertical curvature are not necessary or practical, existing design values may be retained. Specific site investigations and crash history analysis often indicate that the existing design features are performing in a satisfactory manner. The cost of full reconstruction for these facilities, particularly where major realignment is not needed, will often not be justified. Resurfacing, restoration, and rehabilitation projects enable highway agencies to improve highway safety by selectively upgrading existing highway and roadside features without the cost of full reconstruction. When designing 3R projects, the designer should refer to TRB Special Report 214, Designing Safer Roads: Practices for Resurfacing, Restoration, and Rehabilitation and related publications for guidance.”

The first sentence is worth repeating, with emphasis. The fact that new design values are presented herein does not imply that existing streets and highways are unsafe, nor does it mandate the initiation of improvement projects.

The measured sight distances reported above replace the estimated sight distances based on gap time measurements which were included in the SDEIS. The comments of the Wilson Road Coalition found on pages 50 and 51 of Appendix 12 addressed the gap time analysis, and thus are no longer applicable.

4. PASS-BY FACTOR (DIVERTED TRIPS)

The SDEIS incorporated a 25 percent pass-by factor for the retail-generated traffic. In a letter dated September 24, 2007, from the Wilson Road Coalition (see page 119 of Appendix 12, fourth bullet), the comment is made that this percentage is too low, and that, given prevailing conditions, a higher percentage should have been used.

The pass-by factor is the percentage of the traffic attracted by a retail establishment that is already on the road passing the site. It is included in the total traffic volume entering and exiting the site. In this study “passing the site” was considered to be the traffic passing Wilson Road on both Route 42 and Route 97, rather than just at the Wilson Road driveway intersection. Technically this traffic is called “diverted traffic” rather than “pass-by traffic,” but the principle is the same, and by extending the pass-by locations to the Routes 42 and 97 intersections the total traffic generated by the retail development is calculated to pass through these intersections. This is a conservative approach.

The only intersection in this analysis that was significantly affected by the pass-by factor was the intersection of Routes 42 and 97. At this location, because 25 percent of the retail generation was assumed to be presently passing through the intersection, only 75 percent of this traffic was considered to be “new” traffic and was assigned to the roadway system. (Note: At the intersection of Route 42 and Wilson Road, for example, the 25 percent was assigned to the turning movements in and out of Wilson Road, and subtracted from the through movement on Route 42. This is what is meant by “diverted” traffic.) Using a higher pass-by factor would have had the effect of reducing the retail-generated traffic at this location, not increasing it.

Institute of Transportation Engineers studies have shown that, for smaller retail developments, the pass-by factor may be 50 percent or even higher. The New York State Department of Transportation, however, has stipulated an allowable maximum of 25 percent for the pass-by factor, so 25 percent was used for this study.

If the Board should stipulate that a higher pass-by factor be used in any future analyses, the Applicant will readily agree. The Board, and all other interested parties, should understand, however, that use of the higher factor will reduce, not increase, the development’s traffic impact.

The comment also states that “the developer chose to use the lower trip generation here since it suits his purpose.” Since the use of the lower pass-by factor resulted in a higher

traffic impact, it cannot be said that it “suits his purpose.” The facts show that the contrary is true.

5. TRAFFIC ACCIDENTS

Accident information for the five-year period October 1, 2002, to September 30, 2007, has been provided by the New York State Department of Transportation for the following three sections of Routes 42 and 97:

- a. Route 42 – from the split with Route 97 north to Wilson Road
- b. Route 97 – from the split with Route 42 north and west to the Sullivan County line
- c. Routes 42/97 –Common section from Upper Brook Road to the split

Tables I-2, 3 and 4 (immediately following) summarize the three sections of roadways analyzed. For these three road sections there were a total of 78 accidents over this five year period.

TABLE I-2

**Accident Summary, Route 42 from Route 97 Split to Wilson Road
October 2002 to September 2007**

		Total Accidents			Accident Characteristics (Where Reported)						
Fatal	Injury	Property Damage Only	Non- Reportable	Total Number of Accidents	Wet Road	Fixed Object	Ped & Bike	Truck	Dawn/ Dusk	Day	Night
0	8	5	11	24	3	5	0	1	1	12	10

TABLE I-3

**Accident Summary, Route 97 from Route 42 Split to Sullivan County Line
October 2002 to September 2007**

Total Accidents					Accident Characteristics (Where Reported)						
Fatal	Injury	Property Damage Only	Non- Reportable	Total Number of Accidents	Wet Road	Fixed Object	Ped & Bike	Truck	Dawn/ Dusk	Day	Night
3	23	8	14	48	10	22	0	1	2	30	13

TABLE I-4

**Accident Summary, Routes 42/97 from Upper Brook Road to Split
October 2002 to September 2007**

Total Accidents					Accident Characteristics (Where Reported)						
Fatal	Injury	Property Damage Only	Non- Reportable	Total Number of Accidents	Wet Road	Fixed Object	Ped & Bike	Truck	Dawn/ Dusk	Day	Night
1	1	2	2	6	1	0	0	0	0	3	0

Note that a non-reportable accident typically means that the damage to one or more of the cars was insignificant and there were no injuries to the parties involved. About one-third of the total accidents shown in Tables I-2, 3 and 4 combined fall into this category. Accidents which occurred at the intersections of Wilson Road with Route 42 and with Route 97 were included in the totals of those state highway sections. During the five-year period only one accident was recorded on Wilson Road between these two intersections.

Detailed copies of accident reports for a smaller number of accidents also were furnished by the Deerpark Police Department. These reports were limited to those accidents which were investigated by the local police, but their data are included in the NYSDOT

statistics. A review of these reports showed a mix of multi-vehicle accidents, accidents involving single vehicles and fixed objects, and accidents involving deer. There was no discernable pattern of locations or causes, and driver error or inattention was recorded on many of the reports.

A summary of the number of Fatal and Personal Injury accidents in the Town of Deerpark compared to those in all of Orange County for 2004-2006, based on information published in the NYS Department of Motor Vehicles Summary of Motor Vehicle Accidents, is shown in Table I-5.

TABLE I-5
Comparison Of Deerpark To Orange County Fatal and Personal Injury Accidents
2004-2006

Year	Fatal Accidents County	Non Fatal – Personal Injury County	Fatal Accidents and Personal Injury Deerpark	Deerpark as a Percent of County Total
2004	39	3,681	79	2.1%
2005	47	3,447	64	1.8%
2006	44	3,158	64	2.0%
2007	38	3,246	64	1.9%

A reference was made in the comments to a Federal Highway Association (FHWA) report in which algorithms have been developed for determining accident prediction at rural intersections, which take into account the hazard rating of a rural highway, as well as anticipated traffic volume. An examination of this report showed that these algorithms were developed specifically for the States of Minnesota and Washington. There are many factors that go into determining the accident predictions. The FHWA report clearly states that each state and municipality must develop their own baseline first before making any future predictions. The factors include traffic volumes on the major and minor streets, roadway geometry, including: grades, vertical curves, shoulders, etc, and driveway densities. An examination of the NYSDOT website for accident statistics

did not show any reference to this procedure, and did not provide the required baseline data.

NYSDOT has developed accident rates on various types of highways within the state, on a statewide basis, using data from the New York State Department of Motor Vehicles, updated to June 2008. For rural highways without access control, including both the mainline road and the intervening intersections, the latest accident rate has been calculated at 2.10 accidents per million vehicle-miles of travel. Note that NYSDMV stopped processing most non-reportable accidents in 2002, so these accidents are not included in the calculation.

Accident rates for the three highway sections in the study area are calculated in Table I-6. Accident data are for the October 2002 through September 2007 period. Annual Average Daily Traffic (AADT) volumes are 2008 estimates by NYSDOT.

TABLE I-6

**Calculation of Annual Average Accident Rates
For the Three Sections of Routes 42 and 97**

	Route 42	Route 97	Common Section
Section Length in Miles	1.85	3.31	0.36
AADT in Vehicles per Day	2,910	4,910	9,410
Annual Traffic in Million Vehicles per Year	1.06	1.79	3.43
Annual Travel – Million Vehicles–Miles per Year	1.96	5.93	1.24
Accidents – 5 years*	10	34	4
Accidents – Annual Average	2.0	6.8	0.8
Annual Accidents per Million Vehicles–Miles per Year	1.08	2.05	2.22

*Excludes Non-Reportable Accidents.

On the section of Route 42 between the Route 97 split and Wilson Road, the accident rate is well below the State average. Most of the traffic generated by Deerpark Village will travel this section of highway

On the section of Route 97 between the Route 42 split and Wilson Road, the accident rate is slightly below the State average. Very little of the traffic generated by Deerpark Village will travel this section of highway.

On the common section of Routes 42 and 97 the accident rate is higher than the State average by only six percent. This is a very short section of road, about one-third of a mile in length, and the accidents are almost all attributable to the intersections, where the accident rate is almost always higher than on the mainline of the road. It is noted that there were only four reportable accidents in the five-year period, or less than one per year, road closure in this road section. Records of the Sparrowbush Engine Company, Inc. show the SR97, Hawks Nest, following history of road closures on SR97/Hawks Nest. None exceed 6 hours.

Date	Reason	Length of time	Time of Day	Full/Partial Lane
6/14/2001	MVA	2 hours	Evening	Full closer
6/25/2001	MVA	30 mins	Evening	Full closer
8/5/2001	MVA	1.5 hrs	Evening	Full closer
8/14/2001	MVA	1.5hrs	late night	Full closer
9/8/2001	MVA	1hr	afternoon	Full closer
9/26/2001	MVA	1hr	late afternoon	partial lane
10/21/2001	MVA	45mins	late afternoon	partial lane
1/2/2002	Hazard Con.	1 hr	Morning	Full closer
1/2/2002	MVA	30 mins	afternoon	partial lane
2/1/2002	MVA	1hr	late afternoon	Full closer
2/22/2002	MVA	30 mins	late evening	partial lane
3/8/2002	MVA	30 mins	afternoon	partial lane
7/5/2002	MVA	30 mins	Evening	partial lane
7/8/2002	MVA	1 hr	midnight	Full closer
10/20/2002	MVA	30 mins	Evening	partial lane
11/5/2002	MVA	3 hrs	late evening	Full closer
3/30/2003	MVA	1 hr	Evening	partial lane
4/5/2003	MVA	1 hr	midnight	Full closer
7/6/2003	MVA	1 hr	late afternoon	Full closer
7/10/2003	MVA	1 hr	late afternoon	partial lane
7/13/2003	MVA	6 hrs (fatal)	late afternoon	Full closer
8/15/2003	MVA	1 hr	midnight	partial lane
11/2/2003	MVA	30 mins	Late Morning	Full closer
11/8/2003	MVA	4 hrs	afternoon	Full closer
12/21/2003	MVA	1 hr	afternoon	Full closer
5/26/2004	Hazard Con.	2 hrs	Evening	Full closer
9/15/2004	MVA	30 mins	late afternoon	partial lane
12/10/2004	MVA	2 hrs	late night	Full closer
12/17/2004	MVA	30 mins	late evening	partial lane
4/16/2005	MVA	1 hr	mid afternoon	partial lane
5/22/2005	MVA	30 mins	Morning	partial lane
5/29/2005	MVA	1 hr	late afternoon	Full closer
9/4/2005	MVA	1 hr	afternoon	Full closer
9/20/2005	MVA	2 hrs	late afternoon	partial lane
10/2/2005	MVA	1 hr	afternoon	partial lane
11/2/2005	MVA	45 mins	late afternoon	partial lane
1/14/2006	MVA	1.5 hrs	late evening	Full closer
3/31/2006	MVA	1 hr	late afternoon	partial lane
4/30/2006	MVA	1 hr	Evening	Full closer
6/30/2006	MVA	1 hr	Morning	Full closer
8/4/2006	MVA	1 hr	afternoon	Full closer
8/18/2006	MVA	1 hr	late evening	Full closer
9/22/2006	MVA	3 hrs (fatal)	afternoon	Full closer

1/6/2007	MVA	1 hr	afternoon	Full closer
6/6/2007	MVA	1 hr	afternoon	Full closer
7/1/2007	MVA	5 hrs (fatal)	Evening	Full closer
9/16/2007	MVA	2.5 hrs	afternoon	Full closer
10/21/2007	MVA	2 hrs	late afternoon	Full closer
11/20/2007	MVA	30 mins	Morning	partial lane
3/8/2008	Hazard Con.	1 hr	Evening	Full closer
4/17/2008	MVA	30 mins	Late Night	Full closer
4/27/2008	MVA	30 Mins	late afternoon	Full closer
6/1/2008	MVA	1 Hr	late afternoon	Full closer
10/12/2008	mva	30 mins	late afternoon	Full closer
10/16/2008	Fire	3 hrs	late night	Full closer
10/16/2008	Fire	2 hrs	morning	partial lane
10/18/2008	MVA	1.5 hrs	late night	Full closer
10/26/2008	MVA	45 mins	Afternoon	Full closer
10/26/2008	MVA	30 Mins	late afternoon	partial lane
2/13/2009	Hazard Con.	30 mins	late afternoon	partial lane
2/27/2009	Hazard Con.	45 mins	late afternoon	partial lane
5/16/2009	MVA	1 Hr	late afternoon	Full closer
7/4/2009	MVA	2 hrs	Evening	Full closer
7/22/2009	MVA/Rescue	5 Hrs	late night	Full closer
8/15/2009	MVA	2 hrs	afternoon	Full closer
10/4/2009	MVA	2.5 hrs (fatal)	afternoon	Full closer
2/23/2010	Hazard Con.	1.5 hrs	late evening	Full closer
3/10/2010	MVA	1 hr	Evening	partial lane
3/13/2010	Hazard Con.	2 hrs	morning	Full closer
3/13/2010	Hazard Con.	3 hrs	Evening	Full closer
3/21/2010	MVA	1 hr	late afternoon	partial lane
4/3/2010	MVA	45 mins	late afternoon	Full closer
Definitions:				
MVA:	Motor Vehicle Accident			
Hazard Con:	Hazardous Condition. wires down, rock slide, ice slide, icing conditions, trees down			
Morning:	6a-11a			
Afternoon	12p-3p			
late afternoon	3p-6p			
evening	6p-9p			
late evening	9p-12p			
late night	12a-6a			
Full Closer	Roadway closed from 42 intersection to Wilson Rd			
Partial Lane	roadway close to 1 lane due to scene being on either side of the Hawks Nest			
Fire	any type of fire, vehicle, brush, structure			

6. ACTUAL ROAD PEAK HOUR

At the top of page 46 of Appendix 12 the Wilson Road Coalition comments that “The traffic counting methodology did not identify the true peak hours of traffic for the community, but rather relied on traditional hours based on normal working hours and commuting times.”

Traffic counts made and provided by the New York State Department of Transportation on the common section of Routes 42 and 97 (Station 830073, March 2004) showed that the peak weekday hours for this road section were 7:00-8:00 A.M. and 4:00-5:00 P.M., and that the highest weekday hours were higher than the highest Saturday or Sunday hours. On the section of Route 42 between Route 97 and the Sullivan County line the peak hours were found to be 8:00-9:00 A.M. and 5:00-6:00 P.M., also on weekdays. The SDEIS reported the times that the peak hour counts were taken as 7 am to 9 am and 4 pm to 6 pm and those peak hours are consistent with the NYSDOT data.

Traffic studies look at the highest total traffic generation in the AM and PM hours. This takes into account the existing traffic and adds the project traffic anticipated during that period. While retirement community non-rush hour traffic is somewhat higher than other residential traffic, when added to existing off-peak roadway volumes, the total is still lower than the peak hour traffic studied in these analyses.

7. VAN SHUTTLE SERVICE

After the occupancy of 250 dwelling units, the Home Owners Association (“HOA”) or the Condominium Corporation (“Condominium”) will annually conduct a survey of residents to determine the extent of interest, potential use and desired destinations for a van shuttle service. They will then review the results of the survey and then make a determination as to the feasibility of operating the van service shuttle. If such a service is deemed feasible, it will also use the survey results to establish a schedule, routes and destination points. A summary report describing the survey results and the determination will be provided to the Planning Board. The shuttle will be a project cost of the HOA or

Condominium. If Town facilities are to be considered the HOA or the Condominium or its members shall reimburse the Town, at the same rate as is charged for other residents of the Town.

8. SEPARATE COUNT OF TRUCK TRAFFIC

The April 2004 counts did not provide separate counts for passenger cars and heavy vehicles. In the March 2008 survey trucks and buses were counted separately, although they are included in the total vehicle volumes. In some cases the truck percentages were higher than the two percent default percentage which was used in the DEIS. However, because movements from a stop are the only ones where truck percentages are factored into capacity analyses, only the left and right turns from Route 42 onto Route 97 have any significance in the analyses. The truck percentages for this movement were measured as six percent in the A.M. peak hour and three percent in the P.M. peak hour. Substituting these percentages for the default two percent used would not significantly change the capacity analysis results. Construction traffic would continue during the projected 10 year development period and routine maintenance and delivery truck traffic will be expected after completion.

9. PROJECT TRAFFIC AT ROUTE 97 INTERSECTION WITH WILSON ROAD

The assignment of trips generated by Deerpark Village was based on the trip purposes, the likely directional distribution of these trips and the best travel routes. For the external trips to and from the Deerpark Village retail facilities, it was assumed that these trips would come from all directions, from Route 42 to the north, from Route 97 to the west and from the combined Routes 42 and 97 to the south. In this analysis 21 percent of these trips were assigned to Route 97, passing through the intersection of Wilson Road and Route 97. These trips are shown on the Generated Traffic diagrams (see Appendix 1, pages 11 and 12).

Trips generated by the residential portion of Deerpark Village were all assigned to travel through the intersection of Wilson Road and Route 42 for the following reasons.

- The number of trips between the senior housing and Route 97 to the west would be expected to be minimal, particularly in the highway commuting hours.

- For trips to and from the Port Jervis area the travel route via Route 42 is considerably shorter in both time and distance than the travel route via Route 97, as well as being a safer and more comfortable drive.

- For trips to and from Route 42 to the north it is the only available route.

It is recognized, of course, that there may be a few scattered trips which would pass through the intersection of Wilson Road and Route 97. However, as shown in Tables S-1, S-2 and S-3 (see FEIS Appendix 1, pages 2, 3, and 4), this intersection is projected to operate at Level of Service A and B in the 2015, 2020 and 2025 Build conditions, even adjusted for seasonal peak conditions, and the addition of a small amount of site-generated traffic would not significantly change these operating levels. On the other hand, by assigning all of this traffic to the intersection of Wilson Road and Route 42, the total traffic volumes through that more critical intersection have been maximized, creating a “worst condition” scenario for analysis purposes, and producing a more conservative traffic impact analysis.

Table I-7
DEERPARK VILLAGE: DEIS/SDEIS PROJECT
Intersection Traffic Volumes / Capacity Analyses: 2015 Build Year---- AM Peak Hour

Study Intersection	Volumes				Impacts										
	Existing		% Increase To No-Build		Existing			No-Build			Build				
	No-Build	% Increase To No-Build	Build	% Increase To Build	V/C Ratio	Average Delay In Seconds	Level of Service	V/C Ratio	Average Delay In Seconds	Level of Service	V/C Ratio	Average Delay In Seconds	Level of Service	Is There Adequate Level of Service as Mitigated	
Route 42 & Route 97	Total Intersection	601	14%	879	28%	-	-	-	-	-	-	12.4	B	YES (b)	
	Westbound All	-	-	-	-	0.32	14.0	B	0.40	15.8	C	0.45	16.2	B	YES (b)
	Northbound Thru	-	-	-	-	-	-	-	-	-	-	0.14	13.6	B	" "
	Northbound Right	-	-	-	-	-	-	-	-	-	-	0.13	0.0	A	" "
	Southbound Left	-	-	-	-	0.01	7.7	A	A	7.7	A	0.03	12.8	B	" "
	Southbound Thru	-	-	-	-	-	-	-	-	-	-	0.40	15.6	B	" "
Route 42 & Wilson Road	Total Intersection	244	20%	580	97%	-	-	-	-	-	-	-	-	-	
	Eastbound All	-	-	-	-	0.04	9.5	A	0.07	9.8	A	0.37	13.2	B	YES (a)
	Northbound Left/Thru	-	-	-	-	0.01	7.5	A	0.01	7.6	A	0.08	7.8	A	YES (a)
Route 97 & Wilson Road	Total Intersection	306	12%	363	6%	-	-	-	-	-	-	-	-	-	
	Eastbound Left/Thru	-	-	-	-	0.01	7.9	A	0.01	8.0	A	0.05	8.2	A	YES (a)
	Southbound All	-	-	-	-	0.02	10.3	B	0.03	10.6	B	0.11	11.7	B	YES (a)
Wilson Road & Old Country Rd. West	Total Intersection	31	81%	347	520%	-	-	-	-	-	-	-	-	-	
	Eastbound Left/Thru	-	-	-	-	0.00	7.2	A	0.00	7.2	A	0.00	7.5	A	YES (a)
	Southbound All	-	-	-	-	0.00	8.7	A	0.00	8.8	A	0.00	10.9	B	YES (a)
Wilson Road & Amy Bowers Court	Total Intersection	36	72%	353	469%	-	-	-	-	-	-	-	-	-	
	Westbound Left/Thru	10	70%	136	700%	0.00	7.3	A	0.00	7.3	A	0.00	7.7	A	YES (a)
	Northbound All	3	0%	3	0%	0.00	8.4	A	0.00	8.5	A	0.00	9.5	A	YES (a)
Wilson Road & Old Country Rd. East	Total Intersection	43	60%	361	423%	-	-	-	-	-	-	-	-	-	
	Eastbound Left/Thru	27	70%	219	376%	0.00	7.2	A	0.00	7.3	A	0.00	7.5	A	YES (a)
	Southbound All	4	0%	4	0%	0.00	8.7	A	0.00	8.9	A	0.01	11.0	B	YES (a)
Wilson Road & Project Drive West	Total Intersection	25	100%	289	478%	-	-	-	-	-	-	-	-	-	
	Eastbound Left/Thru	-	-	-	-	-	-	-	-	-	-	0.01	7.5	A	YES (a)
	Southbound All	-	-	-	-	-	-	-	-	-	-	0.18	10.1	B	YES (a)
Wilson Road & Project Drive East	Total Intersection	25	-	340	-	-	-	-	-	-	-	-	-	-	
	Eastbound Left/Thru	-	-	-	-	-	-	-	-	-	-	0.00	7.5	A	YES (a)
	Southbound All	-	-	-	-	-	-	-	-	-	-	0.08	10.7	B	YES (a)

(a). No mitigation required.
(b). Traffic signal for Route 42/Route 97 intersection per FEIS Section I.F. 10 (see FEIS page I-60).

Table I-7 (Continued)
DEERPARK VILLAGE: DEIS/SDEIS PROJECT
Intersection Traffic Volumes / Capacity Analyses: 2015 Build Year--- PM Peak Hour

Study Intersection	Volumes					Impacts								
	Existing		No-Build		% Increase Existing To No-Build	Build	% Increase No-Build To Build	Existing		No-Build		Level of Service	Is There Adequate Level of Service as Mitigated	
	Existing	No-Build	V/C Ratio	Average Delay In Seconds				V/C Ratio	Average Delay In Seconds	V/C Ratio	Average Delay In Seconds			Level of Service
Route 42 & Route 97	Total Intersection	936	1,062	13%	1,267	19%	-	-	-	-	-	-	-	
	Westbound All	-	-	-	-	-	0.44	18.8	C	24.1	0.57	15.9	B	YES (b)
	Northbound Thru	-	-	-	-	-	-	-	-	-	-	-	-	YES (b)
	Northbound Right	-	-	-	-	-	-	-	-	-	-	-	-	YES (b)
	Southbound Left	-	-	-	-	-	0.01	8.9	A	9.2	0.01	9.2	A	YES (b)
Route 42 & Wilson Road	Southbound Thru	-	-	-	-	-	-	-	-	-	-	-	-	YES (b)
	Total Intersection	360	425	18%	749	76%	-	-	-	-	-	-	-	-
	Eastbound All	-	-	-	-	-	0.04	9.5	A	9.8	0.05	9.8	A	YES (a)
	Northbound Left/Thru	-	-	-	-	-	0.02	7.6	A	7.7	0.03	7.7	A	YES (a)
	Total Intersection	431	482	12%	554	15%	-	-	-	-	-	-	-	-
Wilson Road & Wilson Road	Eastbound Left/Thru	-	-	-	-	-	0.01	7.9	A	8.0	0.01	8.0	A	YES (a)
	Southbound All	-	-	-	-	-	0.02	10.3	B	10.6	0.03	10.6	B	YES (a)
	Total Intersection	36	64	78%	407	536%	-	-	-	-	-	-	-	-
	Eastbound Left/Thru	-	-	-	-	-	0.00	7.3	A	7.3	0.00	7.3	A	YES (a)
	Southbound All	-	-	-	-	-	0.00	8.7	A	8.8	0.00	8.8	A	YES (a)
Old Country Rd. West & Wilson Road	Total Intersection	41	69	68%	413	499%	-	-	-	-	-	-	-	-
	Westbound Left/Thru	-	-	-	-	-	0.00	7.3	A	7.3	0.00	7.3	A	YES (a)
	Northbound All	-	-	-	-	-	0.00	8.4	A	8.5	0.00	8.5	A	YES (a)
	Total Intersection	50	79	58%	423	435%	-	-	-	-	-	-	-	-
	Westbound Left/Thru	-	-	-	-	-	0.00	7.3	A	7.3	0.00	7.3	A	YES (a)
Amy Bowers Court & Wilson Road	Northbound All	-	-	-	-	-	0.01	8.7	A	8.8	0.01	8.8	A	YES (a)
	Total Intersection	26	53	104%	421	694%	-	-	-	-	-	-	-	-
	Eastbound Left/Thru	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound All	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Intersection	29	57	97%	399	600%	-	-	-	-	-	-	-	-
Wilson Road & Project Drive West	Eastbound Left/Thru	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound All	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Intersection	29	57	97%	399	600%	-	-	-	-	-	-	-	-
	Eastbound Left/Thru	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound All	-	-	-	-	-	-	-	-	-	-	-	-	-
Wilson Road & Project Drive East	Total Intersection	29	57	97%	399	600%	-	-	-	-	-	-	-	-
	Eastbound Left/Thru	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound All	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Intersection	29	57	97%	399	600%	-	-	-	-	-	-	-	-
	Eastbound Left/Thru	-	-	-	-	-	-	-	-	-	-	-	-	-

(a) No mitigation required.

(b) Traffic signal for Route 42/Route 97 intersection per FEIS Section I.F.10 (see FEIS page I-60).

D. SUPPLEMENTARY ECOLOGY REPORT

This supplementary report has been prepared in response to SDEIS comments regarding vegetation, wildlife, wetlands and pets.

1. NEW FIELD SURVEY AND UPDATED LETTERS FROM NYSDEC AND US FISH AND WILDLIFE SERVICES

The SDEIS includes letters from NYSDEC (dated 3/4/05) and US Fish and Wildlife Service (dated 3/22/05) discussing threatened and endangered species and noting the need for the applicant to conduct its own field survey. Copies of these letters can be found immediately following SDEIS page III-17. In response to these 2005 letters the applicant conducted an extensive field survey in 2005 to supplement earlier field surveys in 1993. The 1993 field survey was completed in connection with the applicant's preparation of the 1996 DEIS for this project. The 1993 and 2005 field surveys are fully discussed in the SDEIS. The 1993 and 2005 surveys provided an accurate assessment of whether there are rare, threatened or endangered flora or fauna utilizing the site for habitat. In Sections III.C and III.D (SDEIS pages III-13 to III-25) the SDEIS establishes that no such species were found in the 1993 and 2005 surveys.

In 2008, the applicant requested updated letters from NYSDEC and US Fish and Wildlife Service. The NYSDEC response, dated April 23, 2008 and the response from US Fish and Wildlife, dated April 11, 2008, are included in this FEIS as Appendix 6. The 4/11/08 Fish and Wildlife response is simply a reference to their website. The 4/23/08 NYSDEC response includes an attached report which their letter describes as follows:

“Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and should not be released to the public without permission from the New York Natural Heritage Program.”

While NYSDEC considers the locations of the species and habitats noted in the report as sensitive and not for public release, they have given their permission to our identification of these species and habitats and we have included each of them in the Species List in Appendix 7 of this FEIS. The project applicant did not rely solely on the NYSDEC habitat data. The applicant also conducted its own field surveys of project area flora and fauna as described immediately below.

In response to SDEIS comments the applicant conducted additional field surveys in 2008. The 1993 survey was completed by Hudak-Crossan, Inc. The Hudak-Crossan firm subsequently was subsumed by Potomac Hudson Engineering, Inc. Both the 2005 and 2008 field surveys were undertaken by Potomac Hudson Engineering, Inc. with the assistance of Wander Ecological Consultants in April 2005 and William Olson in July 2008. The principals of Wander Ecological Consultants include Sharon Ann Wander, who received her Ph.D. in Ecology in 1985 from Rutgers University, and Wade Wander, who has a Master's degree in Ecology and performed the first grassland bird survey for the NJ Nongame and endangered Species Program. William Olson, a qualified botanist with more than 30 years of field experience in NY, PA, and NJ in identifying difficult plant groups and rare plant inventories, walked the site for three days in July 2008 conducting a general assessment of whether the site contains any federal or state listed threatened or endangered species, and specifically searched for three species: Narrow Leaved Sedge, Beaked Agrimony and Northern Wild Comfrey. The first two species are identified in public comments on the SDEIS; the third is included in the report attached to the NYSDEC 4/23/08 letter. The complete results of Mr. Olson's field survey are presented in his report, which is found in Appendix 3. In addition to reporting his survey found no evidence of threatened or endangered species on the site, he reported that none of the above three noted species were found in his three-day site visit in July 2008.

Site surveys of wetlands, flora and fauna since 1993 are summarized immediately below, showing a total of 19 person-days of such surveys completed in the preparation of the DEIS, SDEIS and FEIS.

Summary of Site Field Surveys: 1993, 2005 and 2008

- A. Hudak-Crossan Inc. (subsequently subsumed by Potomac Hudson Engineering)
 - August 16, 1993
 - Flora, fauna field survey
 - 2 person-days
- B. Potomac Hudson Engineering
 - April 13, 14, and 15, 2005
 - Wetlands, flora, fauna field survey
 - 6 person-days
 - April 9, 2008
 - Wetlands, flora, fauna field survey
 - 2 person-days
- C. Wander Ecological Consultants
 - April 13, 14, and 15, 2005
 - Flora, fauna T&E field survey
 - 6 person-days
- D. William Olson
 - July 9, 10, and 11, 2008
 - Flora T&E field survey
 - 3 person-days

The extent of these field studies and the periods during which they were conducted are deemed appropriate for the purposes of conducting a SEQRA environmental review for this 243 acre site.

With regard to vernal pools, it is noted that the site contains several trails and deer stands which at one time were utilized by hunters. These trails and stands display many years of disturbance to the area. The vernal pools located within the uplands also are man-made with the use of a backhoe, displaying more history of disturbance to the site.

The Appendix 7 Species List includes each of the various species identified as having special concern either by public comments on the SDEIS, or by NYSDEC in the report accompanying their April 23, 2008 letter in Appendix 6, or by their listing on the US Fish and Wildlife website. As documented in the Appendix 7 narrative for each listed species, one or more of the following statements applies to each species:

- Site does not provide suitable habitat for the species.
- Species is not State or federally listed as threatened or endangered.
- A three-day field survey in July 2008 to look for the species found no evidence of its presence.
- Species is not included as one of the species of special concern identified in the NYSDEC report accompanying their 4/23/08 letter in Appendix 6, or in the US Fish and Wildlife website.

In view of these factors, it can be concluded that the project will not adversely impact any State or federally listed threatened or endangered species nor any NYSDEC species of special concern.

2. FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES

Federally listed endangered and threatened species and candidate species in Orange County, New York include the Atlantic and shortnose sturgeon and dwarf wedge mussel, none of which would occur on this site as they are ocean and riverine species. Others include the Indiana bat and bog turtle, neither of which are known to occur at an elevation of over 900-1,000', and thus would not be impacted by the project whose lowest point has an elevation of 1,080'. The final species is the bald eagle which was federally de-listed as of August 8th, 2007. See the Species List included in FEIS Appendix 7 for further information.

3. BALD EAGLE

As stated in the July 26, 1995 letter from the NYSDEC, which is included in the DEIS (immediately following DEIS page III-28), the proposed project is well away from the Mongaup River and is not known to be a bald eagle habitat area. The NYSDEC does not anticipate direct negative affects on current bald eagle usage of the Mongaup Valley and surrounding areas. The bald eagle is State Threatened, not Endangered, and as of August 8, 2007 has been federally de-listed. For further information regarding the bald eagle see Species List (Appendix 7, page 3).

The project design has made every attempt to minimize impacts to wildlife through the proposed implementation of wildlife corridors and edge habitat. These corridors and edge habitat will facilitate diverse species of wildlife to travel across interconnecting buffers as needed for foraging and migration.

4. IMPACT OF STP EFFLUENT AND STORMWATER RUNOFF ON FLORA AND FAUNA

The project's STP effluent and stormwater runoff will be subject to quality control measures designed to prevent any adverse impacts to flora and fauna, downstream wetlands, John Woods Brook and the Delaware River.

The proposed project will increase the amount of impervious surface on the site. However, any stormwater runoff discharged both during and post construction must meet all NYSDEC Stormwater SPDES regulations for approval and will be routed through water quality basins prior to discharge to the wetlands. A 100-foot buffer is provided to protect the wetlands. The site plan design will include provisions which will assure that stormwater discharges meet water quality standards. Any discharge will be treated prior to reaching wetlands, and ultimately the Delaware River, to protect these valuable water resources.

The areas on site where the uplands meet the wetlands are considered as the zone with the greatest species diversity. For this reason wetlands are protected and include a 100' buffer around them so as not to disturb this important habitat. The wetlands and wetland buffers on site will not be compromised by the development as the design proposes development to take place outside of these areas. The only encroachment proposed, is upon a minimal 0.23 acres of wetlands anticipated to be disturbed for the construction of an emergency access road at the southwest edge of the site. A U.S. Army Corps of Engineers Nationwide Permit Number 14 (which is a general permit routinely approved) would need to be obtained. This permit provides for a maximum disturbance of half an acre for linear transportation projects.

No proximate off-site wetlands have been delineated or are known to exist.

5. AREA BETWEEN WETLANDS AND DRAINAGE AREAS II AND III

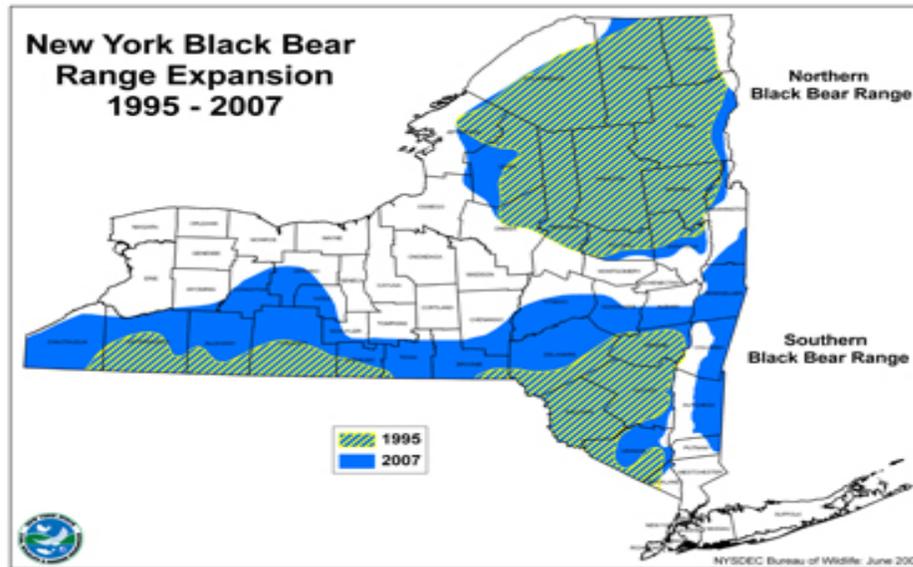
As noted in the FEIS there are two wetland areas on-site. They are each part of a separate stream corridor/wetlands complex that extends off site and down to the Delaware River. The larger wetlands area is adjacent to a stream and pond on-site. That stream flows off-site, under Wilson Road and ultimately into the Delaware River. The second, much smaller wetlands area is not associated with the larger wetland. It is actually at the headwaters of another sub-drainage basin with a stream that flows separately down to the Delaware River. There is no need for protection in the area between the two wetlands beyond the 100 foot adjacent areas.

The 100 foot buffer is normally accepted as appropriate except in situations where a specific protected species is known to require a larger habitat. That does not apply to this project.

6. BEARS

The black bear is a natural component of the woodlands of New York. A major focus of the State of New York wildlife policy is to foster coexistence between black bears and humans. As bear populations have increased during the last few decades, the need to address where bears occur and the effects that humans experience from the bear resource has received increasing levels of attention by wildlife managers in the State. In addition to defining "where" bears occur and "how many" bears there are, there is a growing need to help people better understand, appreciate and coexist with bears. The biological characteristics, behavioral traits, current distribution and other interesting attributes of NY's black bears have been summarized and can be found in Black Bears in New York: Natural History, Range, And Interactions With People (283k pdf). This document was created to serve as an informational resource for individuals who have specific interests in black bears in NYS, or for those who simply may want to know about bears in general. (accessed on August 2, 2008 <http://www.dec.ny.gov/animals/7215.html>) In addition, the

State had twenty-eight public meetings around the State in 2007 and 2008 (<http://www.dec.ny.gov/animals/38155.html>) to solicit input on bear management. NYSDEC is encouraged to see that conservation efforts and the rebound in forested habitat over the last century have resulted in a healthy and thriving bear population that is expanding. See Figure following.



Source: <http://www.dec.ny.gov/animals/38155.html>

Thus, it is clear that education is an important management tool, not placing limitations on development. As a mitigation measure the Community Building will contain an exhibit and pamphlets about the black bear and its interaction with people. Each site plan submission will include a detailed plan for outdoor storage of solid waste and a waste pick-up schedule so as to minimize any attraction of black bears to the site. It will also include a recycling plan for solid waste.

7. HOUSEHOLD PETS

Dog runs are not planned as part of the project.

Owners will be encouraged to bag and dispose of dog waste. All stormwater runoff will be treated in accordance with applicable quality control requirements prior to leaving the site.

Owners will be encouraged to leash their dogs and will be informed of any relevant Town ordinances regarding dog leashing.

If dog owners are permitted to exercise their dogs at the Monguap Wildlife Management Area, they will be subject to the rules applicable to that area. It is assumed that the managers of the Wildlife Area will impose appropriate restrictions on its use as a dog exercise area to avoid potential adverse impacts of such use.

The only pet of concern is the domestic house cat. If allowed outside, studies have shown that cats will kill small mammals and birds, whether they are fed or not and whether they have bells on their collar or not. Feeding of stray or feral cats does not reduce the killing that they do, only whether or not they eat their prey.

As mitigation, the Applicant will make a best effort to insure all prospective occupants are aware of the impacts that cats can have on desirable wildlife and the ecosystem, and measures that can be taken to minimize those impacts. It will be developed from extracts of information from qualified agencies and groups, such as:

American Bird Conservancy <http://www.abcbirds.org/>
The Humane Society
http://www.hsus.org/wildlife/urban_wildlife_our_wild_neighbors/coexisting/pets/if-you-love-wildlife-keep-your-cat-inside.html

Additionally, all project households will be given a copy of Appendix 15 (Frequently Asked Questions About Domestic Cats). Occupants with household pets will be provided with information about local veterinarians and clinics and will be encouraged to consult with these professionals for spaying, neutering procedures, and rabies protection.

E. REVISED PLAN DRAWINGS

Two plan drawings included in the SDEIS have been revised as part of the FEIS. They are:

1. “Land Use Plan, Circulation and Open Space”

This drawing, identified as Figure II-3 and dated June 2008, is found following this page and is presented as a reduced size color print. A full size black and white folded print at a scale of approximately 1” = 200’ is included in FEIS Appendix 17.

This map has been revised to include, in addition to the information previously shown, the following:

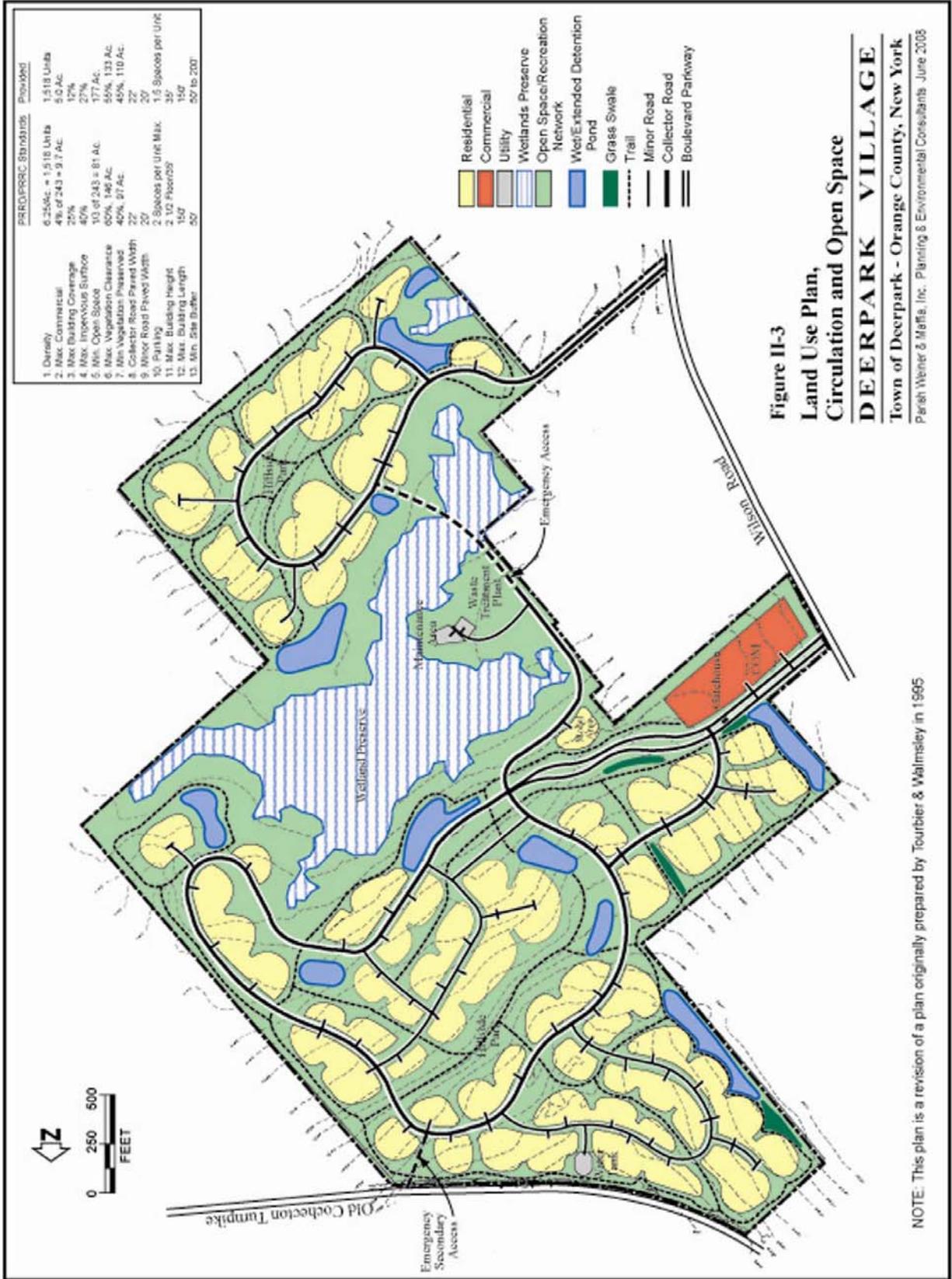
- Topography at 10 foot contour intervals; and
- The location of each stormwater retention area.

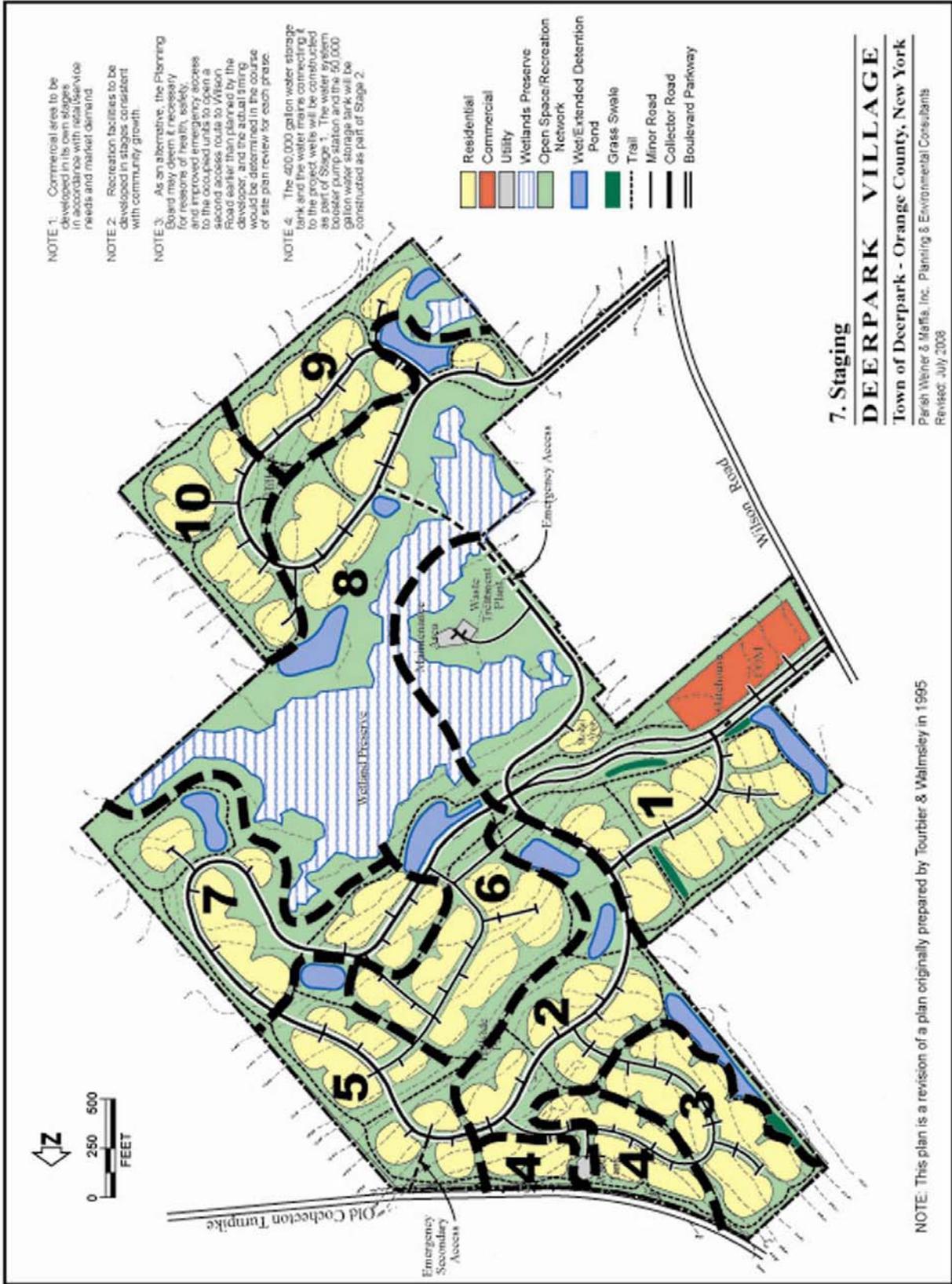
2. “Staging Plan”

This drawing, dated July 2008, is found on the following page and is presented as a reduced size color print. A full size black and white folded print at a scale of approximately 1” = 200’ is included in FEIS Appendix 17.

This drawing has been revised to include the storm drainage retention areas and swales (in addition to the information previously shown). The boundaries of the staging areas have been adjusted to reflect the inclusion of appropriate drainage and other infrastructure components.

For each stage there is a requirement for the submittal of a site or subdivision plan to be approved by the Planning Board which plans are to include details as to infrastructure to be provided and provisions for emergency access.





F. MITIGATION MEASURES

The Deerpark Village project includes the following mitigation measures to help minimize adverse impacts.

1. IMPACT OF CHANGE IN LAND USE

While the project land uses will be different in some respects from those of adjacent uses, it is in conformance with the zoning and Town codes. The predominant project use is residential with a higher dwelling unit density than surrounding areas, but inasmuch as all residential uses will be for senior citizens, the building coverage, height and traffic impacts would be far less than the impact that would be generated by an equal number of single family homes occupied by multi-generational families.

The retail services complex for the site will primarily service the Deerpark Village residents. The remainder of the site will be residential and open spaces. The surrounding neighborhood is totally residential. Thus, the land use character of the area as a whole will remain residential, and the fact that there will be a very small retail/services area which will largely service the local residents does not change that characterization. It is a mitigation element in that it reduces the number of off-site vehicular trips to be made by the development's residents. Furthermore, any possible significant impacts of the retail-services complex would be mitigated by the following factors: first, the Town's zoning is an acknowledgment that such a specialized PRRC community, with a self-contained mix of housing types and service commercial uses, can be compatible with surrounding lower density residential and open space uses given proper site planning considerations and appropriate buffer design (which also apply to all site uses, including parking areas); second, the specific site planning considerations which will be made in order to minimize the impacts of the higher density PRRC residential and commercial uses will include not only the vegetative buffer, but also site design features which will minimize potential land use impacts. For the residential segments, this will include attractively designed residential structures and waste collection, parking, lighting and site use layout which will be planned to avoid creating off-site visual and nuisance impacts. For the commercial portion of the development, this

will include strict consideration of architectural design of the commercial structures and non-commercial uses as they affect adjacent residential land uses both on as well as off the site, both visually and operationally. For example, the exterior appearance of the commercial structures will be considered so that any side of the building which is visible from residences will be compatibly finished; delivery and waste collection areas will be screened or sited so as to minimize exposure to surrounding residences; exterior lighting location, intensity, and hours of operation will be considered so as to minimize or avoid off-site impacts.

The Planning Board wants the commercial area to be located so as to reduce the impact on the surrounding existing land uses. The Applicant understands that the visual impacts of the retail/services complex building design and the buffer area design are important in terms of assuring that it will be compatible with and will protect the surrounding existing land uses. This should be a factor to be considered by the Board at the time of site plan review for the stage at which the development of this complex is proposed. As such, the Applicant agrees that:

- There shall be no signs with external illumination (internal illumination only permitted), no flashing signs, and no neon signs;
- The sole entrance to the retail area shall be from the Deerpark Village access road. There shall be no additional curb cut into Wilson Road;
- The retail building shall be set no less than 100 feet from Wilson Road. The Applicant will preserve not less than 40 feet of natural vegetation between Wilson Road and the retail area including parking areas.

2. IMPACT OF SOIL DISTURBANCE/ALTERATION IN TOPOGRAPHY

All disturbed surfaces will be for structures, paving or landscaping. Siltation and erosion controls will be utilized. Changes in topography will be minimized by proper grading. During the detail site plan approvals for each stage, disturbance limits will be shown and temporary fencing installed to bar accidental disturbance in an effort to protect the undisturbed area.

To the extent possible, dwelling units will be located so as to “fit” into the existing topography and to minimize cutting, filling, and grading; see “Impact of Construction Activities,” below, for mitigating measures that will be utilized during the construction period. The projected alternative of 900 units will further mitigate the disturbance impact and also mitigate the topographic alterations.

3. IMPACT OF INCREASED STORMWATER RUNOFF DUE TO INCREASE IN IMPERVIOUS SURFACES

On-site drainage facilities will provide stormwater quality treatment and detention so that under design storm conditions there will be no increase in the peak rate of runoff from the site. The quality of the effluent will be of higher quality due to stringent NYSDEC requirements. The quantity could be mitigated by the alternate of 900 units vs. the 1,518 in the SDEIS plan. This mitigation is significant in that it will result in less impervious area and less runoff.

Further mitigation will be achieved by subsurface discharge of roof drains from homes, and use of eco-pavers, or similar surfaces, for paving of parking areas, rain gardens, dry swales, infiltration and sand filters which will treat the water quality at the source not the end of the pipe. This will also allow for smaller detention areas and less disturbance. Mitigation can be achieved with the use of low impact, best practice treatments.

4. PRESERVATION OF OPEN SPACE AND WETLANDS

The PRRD ordinance requires that “At least one-third of the gross acreage of any PRRD shall be composed of land which is used for recreational purposes and/or preserved as permanent open space and neither used for motor vehicles nor located within 20 feet of building.” In this case, the 243 acre site will require that a minimum of 81 acres of such recreational and/or open space area be provided.

In the 1,518 unit SDEIS plan, 110 acres of woodlands and wetlands will be conserved and approximately 67 additional acres of landscaped open space created, for a combined

open space area of 177 acres. This open space provision exceeds by 96 acres the requirement of the PRRD zoning district.

The alternate of 900 units would further mitigate the open space impact in a significant manner.

Each site plan or subdivision plan to be presented shall clearly indicate areas which will not be disturbed and those which will be landscaped and used as active or passive recreational areas.

5. IMPACT OF LOSS OF PLANT AND WILDLIFE HABITAT

“Edge habitat” will be created between forest and landscaped areas on the site. Edge habitat is important for the success of some animal species, including deer, certain predatory birds and other animals. Currently, no edge habitat exists on the site, which is fully forested.

Wildlife corridors linking the wetlands and wetlands buffer areas to larger, unfragmented forest tracts off the site will be created. The buffer areas between housing clusters will help to maintain such corridor connections, which will facilitate the movement of wildlife between the wetlands and off-site forest tracts so that wildlife can more effectively utilize the wetlands.

The project community building will contain an exhibit and pamphlets about black bears and their interactions with people.

The applicant will provide prospective residents a copy of Appendix 15 (“Frequently Asked Questions About Domestic Cats”). Additionally, the applicant will prepare a handout for all residents regarding the impacts that cats can have on desirable wildlife and the ecosystem, and measures that can be taken to minimize those impacts. This handout will be developed from extracts of information from qualified agencies and groups, such as:

- American Bird Conservancy <http://www.abcbirds.org/>
- The Humane Society
- http://www.hsus.org/wildlife/urban_wildlife_our_wild_neighbors/coexisting/pets/if-you-love-wildlife-keep-your-cat-inside.html

The most significant mitigation that has been considered is the alternative of 900 units.

6. IMPACT OF ROCK EXCAVATION AND POSSIBLE ROCK BLASTING

Wherever possible, rock excavations without blasting will be undertaken; where blasting is necessary, it will be carried out in accordance with all applicable regulations, and suitable precautions will be used to control flying rock (e.g., heavy metal mats) and to control vibration. During detail site planning the need for blasting can be avoided or reduced by investigation of the feasibility of non-blasting techniques for rock removal. These would reduce potential impacts to the parcel and surrounding areas. Such mitigation can reduce damage to soil and rock substructure, better protect the aquifer, and reduce pollution from blasting agents.

In any event, if blasting is required, adherence to strict protocols for protection of the surrounding properties, and proper damage insurance required, as a condition of site plan approval.

See “Impact of Construction Activities,” below, for additional discussion of mitigation measures for rock excavation and rock blasting.

7. VISUAL IMPACT

The location of the site, the topography, and the vegetation to be maintained make it unlikely that there will be other than fleeting and minimal views of project development from exterior areas.

A landscaping program will be implemented and existing trees will be maintained, wherever possible, along the perimeter of the site. Dwelling units will be located to fit into the existing topography to minimize visibility from adjacent properties. (See also mitigating measures for “Impact of Change in Land Use,” above.) Plantings of native

evergreens in areas which would be within external view corridors will increase year round screening as a mitigation to the visual impact.

At the time of submission of site plans for individual sections, those site plans shall show the finished floor grade of the first level as well as the height of the structure to its peak level. The designs shall, to the maximum extent possible, locate structures horizontally and vertically so as to minimize views from external occupied properties. Where, a proposed development section may potentially occur within the viewshed of nearby external properties, longitudinal cross section diagrams shall be supplied, drawn to scale and showing sight lines from the external property, any intervening topography, trees, tall shrubbery, walls and the proposed new structure at its proposed height.

The 900 unit alternative would have a lesser number of buildings and thus permit site design which is likely to be more attractive.

8. MITIGATING IMPACT ON OFF-SITE WELLS

In conjunction with a permit application for the actual construction of each phase of the water supply system, the project will, at its own expense, monitor all off-site wells determined to possibly be impacted by the operation of the project water system. Off-site wells will be selected and monitored in accordance with the Well Monitoring Agreement and Program found in SDEIS Appendix C. If such testing indicates the project water system will cause the failure of an off-site well, the project will formulate and implement, at its own cost, an appropriate remedy to make the affected property owner whole by assuring the availability of an adequate water supply. In some instances the remedy may call for the connection of the project water system to the affected off-site property, and in the event the project water supply is found to have an unpleasant chlorine after-taste, a charcoal filter will be installed at each of the properties where this problem may be experienced. The Well Monitoring Agreement and Program will be administered by a three member team consisting of: (1) the project's hydrogeologist; (2) a second hydrogeologist selected by the town and paid by the project; and (3) the Town Engineer. All decisions regarding participation in the monitoring program and

appropriate remediation will be made by the team. In those instances where the two hydrogeologists are in agreement, their determination shall govern.

The well monitoring program will be implemented in accordance with the provisions detailed in Sections II.A, II.B., and II.C. of SDEIS, Appendix C. Those three sections are titled as follows:

- II.A. Monitoring Off-Site Wells
- II.B. Selection of Off-Site Wells
- II.C. Off-Site Wells/Recordkeeping and Reporting

In an effort to reduce the impact of off-site wells, an alternative of less units (900) will reduce the impact on groundwater supply. Also, at each site plan review stage, the re-testing of the wells and drawdown from previous stages will help to evaluate impacts of future.

Section I.H discusses the possible use of subsurface discharge for a portion of the sanitary sewage effluent, a practice that would augment subsurface recharge of the groundwater supply.

9. IMPACT OF GENERATION OF SEWAGE

Sanitary sewer lines and a sewage treatment plant (STP) will be installed to serve the proposed development.

In consideration of various comments on the SDEIS, the applicant has decided that, in place of the RBC plant previously proposed, Deerpark Village will use an Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter System STP; the Applicant plans to use the Aqueonics' patented Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter System or an equivalent. This system employs a triple stage aerobic and triple stage anaerobic process as well as fixed film contact with biota, and is considered superior to the RBC process. This system is more fully described in FEIS Appendix 5 and in FEIS Section II.A. ("Responses to Comments of the Public") in the sub-section titled "Comments Regarding STP and Sanitary Sewage System." In as much as the system will fully meet requirements of the DRBC and the NYSDEC and NYSDOH, it

will address the objectives of the protection of water quality in the John Woods Brook and the Delaware Area Ecosystem.

All buyers of units in Deerpark Village will be supplied with informational documents regarding disposal of toxic and dangerous materials.

The building systems will include state of the art water saving devices in order to reduce sanitary sewage effluent. After 450 units have been completed, the Planning Board can require a study to determine if in-ground discharge for 10% of the total anticipated sewage effluent is feasible as additional mitigation for groundwater recharge impacts.

10. IMPACT OF ADDITIONAL TRAFFIC GENERATED AT THE INTERSECTION OF ROUTE 42 WITH ROUTE 97

Traffic studies show that, assuming certain worst case seasonal conditions, the Routes 42/97 intersection may require mitigation during the later stages of development, probably after the construction of about 80% of the proposed development.

To mitigate this condition the applicant has agreed to install a traffic signal after 80% of the units are completed, and/or at the earliest of the following two criteria: when an updated traffic study for a subsequent stage would show a level of service E or F, subject to the New York State Department of Transportation (NYSDOT) approval, and meeting the signal warrants established in the Manual of Uniform Traffic Control Devices; or at any subsequent period when NYSDOT approval is obtained. The alternative reduces the density to 900 units. This will mitigate the intersection traffic impact. In the event that any mitigation improvements are required the performance bonds to be provided in accordance with the zoning ordinance provisions will assure implementation of the mitigation measures.

11. WILSON ROAD IMPROVEMENT

The extensive traffic analyses conducted to date for traffic to be generated by Deerpark Village and other non-project traffic for the build Year (year of complete development)

indicate that Wilson road at its present width has sufficient capacity to accommodate projected traffic.

The applicant has agreed to perform follow-up traffic surveys prior to each stage of development for which site plan approval will be required. Should those surveys, and a subsequent Town Board determination, find that the project will produce impacts that affect traffic capacity or safety, the developer will pay for the proportion of costs necessary to address impacts which are equal to the ratio of Deerpark Village traffic generation to total projected traffic generation.

With regard to “wear and tear” impacts on Wilson Road which may require repaving within the present right-of-way, the Applicant has agreed that, should the Board accept the 1,518 unit proposed plan, a payment by the Applicant of a \$1,000 contribution to a Highway Improvement Fund to be established by the Town Board will be made each time that a Certificate of Occupancy will be approved for a new dwelling unit by the Town Building Inspector.

12. UPDATED TRAFFIC STUDIES

After completion of the first phase of development but not before development of 200 units, and at the time of submittal of a site plan application for a subsequent stage of development,, the application will be accompanied by a traffic survey which will examine existing conditions at sample study intersections (Route 42/97 intersection, Route 42/Wilson Road intersection, and the main site/Wilson Road intersection). Each site plan review stage shall include traffic counts for selected peak hours during the summer and weekend periods. Should the survey determine that there have been increases in traffic that are substantially greater than were projected in the EIS, the analysis of all intersections will be considered and if any improvements are necessary in order to mitigate the impacts of that stage of development, the developer will be responsible for installing those improvement as part of the construction of that development stage. The traffic studies shall be reviewed by the Town Engineers or Planning Board consultant.

13. TRAFFIC MANAGEMENT PROGRAM

After the completion of 250 units, and if required by the Planning Board, the applicant will agree to submit a Traffic Management Program for construction stage traffic for each stage of development for review by the Town Engineer and the Town Police Department. Construction traffic shall be mitigated through regulations such as stabilized driveways, no idling of vehicles for more than 5 minutes, and special staging and parking areas.

14. VAN SHUTTLE SERVICE

In order to mitigate off-site trips by Deerpark Village residents, a van shuttle service will be instituted if it is determined that there is sufficient demand for the service.

After the occupancy of 250 dwelling units, the Home Owners Association (“HOA”) or the Condominium Corporation will annually conduct a survey of residents to determine the extent of interest, potential use and desired destinations for a van shuttle service. They will then review the results of the survey and make a determination as to the feasibility of operating the van shuttle service. If such a service is deemed feasible, it will also use the survey results to establish a schedule, routes and destination points. A summary report describing the survey results and the determination will be provided to the Planning Board.

The Planning Board believes that a van shuttle service, to be operated by a homeowners association or a condominium corporation using its own and/or passenger funds would be a most desirable service in a senior citizen community and it will encourage the developers to implement this service at a time when occupancy levels will make it feasible.

15. IMPACT OF INCREASE IN POPULATION LEADING TO SOME INCREASE IN DEMAND FOR MUNICIPAL AND COMMUNITY SERVICES

The impact on municipal services will be minimal inasmuch as the community will be largely self sufficient.

The community will: supply its own water and service its own distribution lines; provide for its own sanitary sewage disposal and service its sewer lines; provide for its own recreational needs; maintain and plow its own streets; and, because this is a community in which all heads of household will be required to be 55 years of age or older, it is not expected that it would generate significant numbers, if any, of school age children for the public school system.

The increase in the number of police calls and fire calls and some increased activity in regard to the Town's clerical functions will be more than offset by the \$7.9 million per year increase in property tax revenues to taxing jurisdictions. These revenues will include approximately \$5.9 million annually for the school district, particularly lightening the burden for those school district taxpayers who are homeowners in the Town of Deerpark.

The project will have its own 24-hour internal security personnel at such time as a sufficient number of units have been developed to make round the clock personnel economically feasible. Further, at least one of the security personnel will be EMT trained and certified.

At each stage, as a part of the site plan or subdivision application, the applicant shall describe the security provisions to be implemented during that stage.

The impacted demand to services would be gradual and based on their current market conditions. The alternative of 900 units would substantially reduce and mitigate the impacts.

16. IMPACT ON AIR QUALITY

It is not known at this time whether the units will or will not have fireplaces. If there are fireplaces provided in any of the units they will not be wood burning fireplaces (which do have the potential to emit large amounts of particulate pollution). If fireplaces are provided in any of the units, they will be propane, electric, or gel fuel fireplaces, which will not emit air pollutants in quantities that will cause any air pollution problems.

At each stage of application for building permits, the energy source to be utilized will be that which will have the least impact on the natural environment and which will be cost efficient for project inhabitants.

The 900 unit alternate will reduce the project's use of energy and thus reduce potential impacts on air quality.

17. OFF-SITE MITIGATION: CULVERT UNDER ROUTE 97

There is an existing culvert under Route 97 that carries current flow from the project area and surrounding area which has been found to be inadequately sized for accommodating a 100-year design storm.

This is an existing inadequate condition. The project plan provides for on-site detention basins that would limit storm flow to be no greater than the pre-development condition. Thus, the condition would not be exacerbated by project development.

Nevertheless, the applicant has agreed to provide a portion (90%) of the cost of installation of a new box culvert (estimated at a size of 4 feet x 10 feet), excluding the cost of property acquisition, or cost of a construction period easement, if required. The applicant's proposal is based on the proportion of stormwater flow from the project area that will utilize this culvert.

18. IMPACT OF CONSTRUCTION ACTIVITIES

The primary aim of the construction management program will be to reduce soil erosion during site preparation activities. Construction management techniques also will be used to stabilize slopes, reduce dust and preserve existing vegetation.

The following summarizes mitigation measures to reduce potential adverse impacts resulting from construction activities.

Soil Erosion Protection for Land Grading and Removal Of Vegetation Or Topsoil

The cut face of excavations or fills will be graded to be no steeper than the safe angle of repose for the materials encountered, and flat enough for stabilization and maintenance.

Topsoil which is removed during construction will be saved for later use in grading or landscaping.

Topsoil stockpiles will be surrounded by hay bales to prevent erosion.

Fill areas will be drained.

Fill material will be free of all decomposable material.

Straw bale barriers and silt fences will be used, where necessary, to limit any erosion.

Any areas stripped of vegetation during construction will be left bare for the shortest time possible.

Short-term vegetation (ryegrass, oats) will be planted in those areas which are graded/cleared, but not immediately subject to construction.

In areas where temporary vegetation is not appropriate, the soil may be stabilized with mulch, which will conserve moisture, prevent surface compaction, reduce weeds, and reduce runoff and erosion.

Materials which will be used for mulching include straw, hay, salt hay, wood fiber, synthetic soil stabilizers and sod.

Protective coverings on disturbed areas will be anchored, and surface flows across all newly seeded and mulched areas will be diverted with berms and swales.

Timely planting of new permanent vegetation such as trees, shrubs and ground cover will also reduce erosion and runoff, control blowing dust and provide long-term soil stabilization.

A schedule of stabilization and disturbance will be included in the Stormwater Pollution Prevention Plan that will be submitted as part of the documents accompanying the Site Plan Application that will be prepared for each separate stage following the Town's approval of this project's Comprehensive Development Plan.

Mitigating Movement of Dust

Methods to control dust include minimizing the area of the site subject to disturbance at any one time, limiting movement of trucks and construction equipment, and using stone tracking pads.

Use of mulch or other temporary covers on exposed soil areas will help reduce dust levels.

During dry weather, daily water spraying of all unpaved areas subject to disturbance will help to control dust.

Bales of hay will be used to control air currents and reduce soil blowing.

Rock Excavation and Possible Rock Blasting

In those instances in which rock excavation is required it is possible that blasting , may be required, or that hydraulic rock chippers (hoerams) may be needed for areas requiring minor excavation or to further break up larger blocks remaining after initial blasting. In instances where rock blasting is necessary, to ensure that the blasting does not adversely affect adjoining properties the following control and monitoring procedures will be followed:

- If particularly sensitive structures or uses exist near blast areas, and blasting or hoeramming cannot be accomplished without potentially affecting these structures or uses, drilling and splitting procedures will be employed. This will either be through the use of hydraulic splitters (wedges) or chemical expansion compounds.
- If required, blasting will be conducted using multiple ignition delays so that the weight of explosive detonated at any one time is sufficiently small so that vibration and sound emissions are within acceptable limits. Other blasting variables such as hole spacings, stemming lengths, detonating systems and mottings will be designed to minimize sound emissions and the possibility of flyrock.
- Prior to and following completion of rock blasting, a survey of neighboring properties and uses will be conducted by an independent consulting firm. This survey will include a written and photographic or videographic record of the existing conditions. Structures and uses to be surveyed will include those within the area where predicted vibration levels approach the maximum specified allowable level.
- The applicant, or the firm performing the rock blasting, will provide evidence of proper insurance to protect the Town and any potential nearby properties in the case of any accident. The amount of insurance and those to be named as covered

persons or entities shall be subject to the approval of the Town Attorney and/or Town Engineer.

- The magnitude of the vibrations and sound emissions will be monitored at critical locations using seismographs. If sound and vibration emissions exceed levels allowed by local codes, ordinances or otherwise specified levels, the blasting program will be modified until these emissions are within the established limits. The first blast within a given area will be designed to have a maximum equivalent weight of explosive per delay such that the vibration level at the closest structure or use is below established damage producing thresholds. Once a site specific relationship between vibration level, distance from blast and blast size is established, the blast design will be modified to optimize the rock excavation process while still ensuring vibration and sound emissions within established limits.

In the event any areas are excavated below the groundwater table, appropriate engineering and construction techniques will be employed to assure that there is no surface sheet flow of groundwater on the site or on adjacent properties.

As site plans are presented for review and approval, where blasting appears to be required, a detailed blasting plan will be presented which will specify weight of explosive and other blasting variables as well as identification of the specific properties which are to be the subject of an independent pre and post blasting survey.

Tree Damage

A tree protection program will be implemented in order to protect and preserve both individual specimen trees and buffer areas with many trees, where such trees have been identified for retention in an approved site plan. Among the steps which will be taken to preserve and protect these trees are the following: no construction equipment will be parked under a tree canopy; there will be no excavation or stockpiling of earth underneath trees; trees to be preserved will be marked conspicuously on all sides; in areas of concentrated activity, trees will be fenced at the outer drip line; no earth fills

greater than 6” in depth will be made beneath trees to be preserved; in fill areas, trees will be preserved in tree wells, or through the use of retaining walls; in cut areas, trees will be preserved with retaining walls.

Construction Noise

Construction activities will be limited to normal working hours. Except in cases of emergencies or unusual conditions, activities generating noise or substantial construction traffic will be limited to Monday to Friday, 8 AM to 5 PM, with some small variations during differing seasons. No work will be scheduled for national holidays or widely practiced religious holidays.

Construction Traffic Damages to Wilson Road

The Applicant will be responsible for the repair of any damages to Wilson Road which occur as a result of Deerpark Village construction traffic.

19. ARCHEOLOGY STUDIES

The applicant will, at each stage of site plan review, commission a qualified archeology firm to conduct shovel tests along a 50 foot grid for areas to be disturbed by that phase of development.

G. WATER SUPPLY QUALITY

In response to comments on the SDEIS, the following table has been prepared to show the radon levels found in the water tests of the seven project production wells and to present the test results for the seven wells in summary form for all test parameters.

The table divides the tested parameters into three broad categories: inorganic, organic and radiological. The radon results are included in the radiological category.

The table shows that the water supply will meet the requirements for a public water supply.

Table I-8

Deerpark Village Water Quality

<i>Parameter Inorganic Componants</i>	<i>Standard</i>	<i>TW-1</i>	<i>TW-3</i>	<i>TW-4</i>	<i>TW-5</i>	<i>TW-7</i>	<i>TW-8</i>	<i>TW-10</i>
Color	15	10	15	15	15	15	15	15
Odor	3	1	1	1	1	1	1	1
Alkalinity, Total as CaCO3	ns	64.0	43.4	17.4	49.3	61.2	45.0	42.1
Langelier Saturation Index	ns	-1.04	-2.03	-2.34	-1.47	-1.14	-1.83	-1.82
Solids, Total Dissolved (TDS)	ns	42	270	42	52	108	326	74
Chioride	ns	5	5	5	5	5	5	5
pH	ns	7.42	7.02	7.14	7.2	7.55	7.27	7.17
Nitrate + Nitrite as N	ns	0.20	0.20	0.2	0.2	0.2	0.2	0.21
Hardness, Calcium (as CaCO3)	ns	39.80	32	15.6	32.5	42.4	33.1	34.8
Iron (Fe)	300	60	60	60	60	60	60	279
Manganese (Mn)	300	10	10	10	16.3	10	10	10
Zinc (Zn)	5000	60	20	20	20	20	20	20
Lead (Pb)	15	2.80	0.30	0.87	0.3	0.3	0.63	0.3
Nitrate as N (N03-N)	10000	0.50	0.5	0.5	0.5	0.5	0.5	0.5
Nitrite as N (N02-N)	1000	0.25	0.01	0.01	0.25	0.01	0.01	0.01
Sodium (Na)	ns	3500	2600 na		2900	3200	2000	2700
Mercury (Hg)	2	0.20	0.20	0.2	0.2	0.2	0.2	0.2
Cyanide, Total	200	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Fluroide	2200	0.20	0.20	0.2	0.2	0.2	0.2	0.2
Berylium (Be)	4	1	1	1	1	1	1	1
Antimony (Sb)	6	0.40	0.58	0.4	0.4	0.4	0.4	0.4
Arsenic (As)	50	1.50	1.40	1.4	1.4	2.2	1.4	1.4
Barium (Ba)	2000	2	8.10	18.9	1.6	29.2	14.1	13.5
Cadmium (Cd)	5	0.30	0.30	0.3	0.3	0.3	0.3	0.3
Chromium (Cr)	100	0.30	0.30	0.81	0.3	0.43	2.7	2.5
Nickel (Ni)	Ns	0.55	0.99	0.2	0.5	0.87	0.65	0.65
Selenium (Se)	50	3	3	3	3	3	3	3
Thallium (TI)	2	0.30	0.30	0.3	0.3	0.3	0.3	0.3
Sulfate	250000	9.85	18.20	17	10.5	10.2	11.9	12.4

ns= no standard
na= not available

Deerpark Village Water Quality (continued)

<i>Parameter Organic Compounds Standard</i>	<i>TW-1</i>	<i>TW-3</i>	<i>TW-4</i>	<i>TW-5</i>	<i>TW-7</i>	<i>TW-8</i>	<i>TW-10</i>
1,2-Dibromoethane (EDB)	5	u	u	u	u	u	u
1,2-Dibromo-3-chloropropane	50	u	u	u	u	u	u
Benzene	5	u	u	u	u	u	u
Ethylbenzene	5	u	u	u	u	u	u
Toluene	5	u	u	u	u	u	u
o-Xylene	5	u	u	u	u	u	u
m&p-Xylenes	5	u	u	u	u	u	u
Naphthalene	50	u	u	u	u	u	u
Chlorobenzene	5	u	u	u	u	u	u
1,2-Dichlorobenzene	5	u	u	u	u	u	u
1,3-Dichlorobenzene	5	u	u	u	u	u	u
1,4-Dichlorobenzene	5	u	u	u	u	u	u
Chloromethane	5	u	u	u	u	u	u
Bromomethane	5	u	u	u	u	u	u
Dichlorodifluoromethane	5	u	u	u	u	u	u
Vinyl chloride	50	u	u	u	u	u	u
Chloroethane	5	u	u	u	u	u	u
Methylene chloride*	50	2.30	1.90	2.4	2.3	u	u
Trichlorofluoromethane	50	u	u	u	u	u	u
1,1-Dichloroethene	5	u	u	u	u	u	u
Bromochloromethane	5	u	u	u	u	u	u
1,1-Dichloroethane	5	u	u	u	u	u	u
trans-1,2-Dichloroethene	5	u	u	u	u	u	u
cis-1,2-Dichloroethene	5	u	u	u	u	u	u
Chloroform	50	u	u	u	u	u	u
1,2-Dichloroethane	5	u	u	u	u	u	u
2,2-Dichloropropane	5	u	u	u	u	u	u
1,2-Dibromoethane (EDB)	50	u	u	u	u	u	u
1,1,1-Trichloroethane	5	u	u	u	u	u	u
Carbon tetrachloride	5	u	u	u	u	u	u
Bromodichloromethane	50	u	u	u	u	u	u
1,2-Dichloropropane	5	u	u	u	u	u	u
1,1-Dichloropropene	5	u	u	u	u	u	u
Trichloroethene	5	u	u	u	u	u	u
1,3-Dichloropropane	5	u	u	u	u	u	u
Dibromachloromethane	50	u	u	u	u	u	u
Dibromomethane	5	u	u	u	u	u	u
Bromoform	50	u	u	u	u	u	u
1,1,1,2-Tetrachloroethane	5	u	u	u	u	u	u
1,2,3-Trichloropropane	5	u	u	u	u	u	u
1,1,2,2-Tetrachloroethane	5	u	u	u	u	u	u
Tetrachloroethene	5	u	u	u	u	u	u

Deerpark Village Water Quality (continued)

<i>Parameter Organic Compounds Standard</i>	<i>TW-1</i>	<i>TW-3</i>	<i>TW-4</i>	<i>TW-5</i>	<i>TW-7</i>	<i>TW-8</i>	<i>TW-10</i>
Bromobenzene	50	u	u	u	u	u	u
2-Chlorotoluene	5	u	u	u	u	u	u
4-Chlorotoluene	5	u	u	u	u	u	u
cis-1,3-Dichloropropene	5	u	u	u	u	u	u
trans-1,3-Dichloropropene	5	u	u	u	u	u	u
1,2-Dibromo-3-chloropropane	50	u	u	u	u	u	u
Isopropylbenzene	5	u	u	u	u	u	u
Styrene	5	u	u	u	u	u	u
n-Propylbenzene	5	u	u	u	u	u	u
tert-Butylbenzene	5	u	u	u	u	u	u
sec-Butylbenzene	5	u	u	u	u	u	u
1,3,5-Trimethylbenzene	5	u	u	u	u	u	u
p-Isopropyltoluene	5	u	u	u	u	u	u
1,2,4-Trimethylbenzene	5	u	u	u	u	u	u
n-Butylbenzene	5	u	u	u	u	u	u
Hexachlorobutadiene	50	u	u	u	u	u	u
Lindane	0.2	u	u	u	u	u	u
Heptachlor	0.4	u	u	u	u	u	u
Aldrin	NL	u	u	u	u	u	u
Heptachlor eposide	0.2	u	u	u	u	u	u
Dieldrin	5	u	u	u	u	u	u
Endrin	2	u	u	u	u	u	u
Methoxchlor	40	u	u	u	u	u	u
Toxaphene	3	u	u	u	u	u	u
Chlordane	2	u	u	u	u	u	u
Total PCBs	0.5	u	u	u	u	u	u
Aldicarb sulfoxide	3	u	u	u	u	u	u
Aldicarb sulfone	2	u	u	u	u	u	u
Oxamyl	200	u	u	u	u	u	u
Methomyl	3	u	u	u	u	u	u
3-Hydroxycarbofuran	ns	u	u	u	u	u	u
Aldicarb	3	u	u	u	u	u	u
Carbofuran	40	u	u	u	u	u	u
Carbaryl	700	u	u	u	u	u	u
1,2,4-Trichlorobenzene	5	u	u	u	u	u	u
1,2,3-Trichlorobenzene	5	u	u	u	u	u	u
1,1,2-Trichlorobenzene	5	u	u	u	u	u	u

Bold = EPA standard

U = Undetected

NL = No level allowed

*Common lab contaminant

Deerpark Village Water Quality (continued)

<i>Parameter</i>	<i>Radiological Standard</i>	<i>TW-1</i>	<i>TW-3</i>	<i>TW-4</i>	<i>TW-5</i>	<i>TW-7</i>	<i>TW-8</i>	<i>TW-10</i>
Gross Alpha	15	0.63	0.85	0.83	0.2	0.28	0.3	0.17
Gross Beta	C	0.51	0.50	0.1	0.4	0.6	0.02	0.4
Radium (226)	5	0.06	0.01	0.01	0.03	-0.02	0.08	0.08
Radium (228)	5	0.30	0.40	0.38	0.009	-0.15	0.05	0.19
Radon (+- Precision) pCi/l(T)	ns-4000	870	2290	1430	2650	1280	1990	1680

C = Maximum amount is 4 millrems per year based on calculation of yearly exposure by body weight

ns = no standard set, recommended level is less than 4000 pCi/L

H. SEWAGE TREATMENT PLANT

In consideration of various comments, the applicant has decided that, in place of the RBC plant previously proposed, Deerpark Village will use an Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter System STP; it plans to use the Aqueonics' patented Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter System (hereafter referred to as the "Aqueonics System") or an equivalent. This system is more fully described in Appendix 5 (Description of Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter System Sewage Treatment Plant). It employs a triple stage aerobic and triple stage anaerobic process as well as fixed film contact with biota, and is considered superior to the RBC process for the following reasons:

- a. It does not suffer from the mechanical failures to which the RBC is prone.
- b. Repairs are more quickly made, when required, and result in less disruption to operation.
- c. It is a "plugged flow" system which sequentially processes flow, whereas the RBC system is a mixed system in which flow may bypass the treatment contact.
- d. It has a smaller footprint.
- e. It has superior odor and noise control.
- f. It can meet and exceed treatment limits 24/7 without being impacted by weather conditions.
- g. It has a relative insensitivity to variation in influent quality and quantity.
- h. It meets and exceeds all effluent discharge limits imposed by any New York regulatory authority.
- i. It provides de-nitrification of the effluent to ensure protection of the environment and New York's natural resources.
- j. It is capable of meeting any expected future changes in effluent discharge limits that might be imposed by regulatory authorities.
- k. It provides extremely clean effluent capable of being used for beneficial reuse purposes, such as irrigation of green space, toilet flushing, fire protection, etc.
- l. It will meet USEPA Title 22 Beneficial Reuse Standards, recognized as the most stringent beneficial reuse standard worldwide.

m. It is totally contained within a building resembling the surrounding architecture to ensure community acceptance.

The following photo is of an Aqueonics STP located within an age-restricted community in southern New Jersey, which is reported by Aqueonics as having 100% acceptance by the homeowners. Comments made by the sales staff of this age-restricted community can be found by going to www.waterefficiency.net and selecting “past issues” and selecting the article entitled “Wastewater Mining and Reuse” and scrolling down to the last part of the article and reading the comments made by Mr. Bob Henzy, Sales Manager for Osprey Point Development.



Aqueonics STP building in background, 2 residences in foreground.

It should be noted that wastewater treatment systems are specifically designed to meet effluent limitations established by regulatory authorities, and the proposed Aqueonics System is designed to meet NYSDEC and Delaware River Basin Commission requirements with adequate margins of safety. In recent communications with Mr. John Sansalone of NYSDEC, Aqueonics was informed that New York regulatory authorities are in the process of entertaining the adoption of Nitrate removal requirements in all wastewater treatment systems in response to the demand for better protection of water resources. The Aqueonics System will be capable of meeting such requirements.

The treated effluent from the proposed Aqueonics System or equivalent STP will meet all requirements set forth in Article 15 of New York State Environmental Conservation Law for the protection of water for all proposed disturbances to the bed or banks of the Class "A" stream (John Woods Brook) situated on the site.

Aqueonics' Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter Treatment System, or equivalent, is entirely enclosed in a building. This is expressly for the purpose of containing noise and odors, as well as for uniformity of operation and protection from the environment. Fresh air is withdrawn from the outdoors and is swept through all areas of the treatment processes, then filtered and chemically scrubbed before discharge to neutralize odors. External to the STP, odors are designed to be unnoticeable, and noise is the equivalent of the hum associated with a private swimming pool.

Aqueonics has built STPs in New York State, and in nearby Sussex County, New Jersey which are available for tour by interested parties. Some nearby examples of such systems which may be toured by interested regulatory bodies and/or project stakeholders are listed below. Aqueonics will be pleased to make arrangements for guided tours and access to these facilities.

Architectural elevations and or renderings of the sewage treatment plant will be provided as part of the site plan application process.

	Facility Name	Street	Location City	ST.	Use Type
1	Mahopac Village Center	Rt. 6	Mahopac	NY	Shopping Center
2	Bear Brook Golf Course and Development	Rt. 94	Fredon Twp.	NJ	Golf Course
3	Sussex County Mall	Rt. 206 N	Hampton Twp.	NJ	Commercial and Future Residential
4	Clove Hill Manor	Rt. 23	Wantage Twp.	NJ	Residential Development (Age Restricted)
5	Franklin Square Plaza		Franklin Lakes	NJ	Commercial
6	Mt. Arlington WWTP	Howard Blvd.	Mt. Arlington	NJ	Commercial, Residential

In addition to the above listed projects in relatively close proximity to the Deerpark Village site, Aqueonics has built many other STPs in New York and New Jersey that are available for visitation and evaluation. Aqueonics also has STPs in ten other states including the environmentally sensitive areas of Southern and Northern California. In many instances, the Aqueonics Alternating Aerobic/Anaerobic Fixed Film Media Trickle Filter Treatment System sewage treatment plants have been placed within fifty feet of inhabited residences and have never had any negative impact due to odor or noise being emitted from the treatment facility.

The analyses in the SDEIS project an estimated domestic water supply demand of 189.1 gallons per minute. The analyses project that there will be a 295-gallon per minute average annual subsurface recharge. Thus, under these projected conditions the recharge rate would safely exceed the usage rate and, as a result, there would be no adverse impacts.

However, there is a possibility that because of factors such as, but not limited to, pipe leakage, or higher than expected usage, the usage would exceed that which was estimated. In order to create a potential larger safety factor to assure adequate water supply the following procedures would be followed as an additional mitigation element:

- a. After 1,000 dwelling units are constructed and occupied, a survey would be conducted to establish the then current annual water demand per dwelling unit.
- b. If the survey indicates that demand is such that, at full development of 1,518 units, the demand will exceed 189 gallons per minute, a subsurface disposal plan will be studied.
- c. The subsurface disposal plan will examine the physical feasibility of subsurface disposal of 10% of the total estimated project demand, i.e., a disposal of about 19 gallons per minute, and the economic impacts to project owners of developing and operating the subsurface disposal system.
- d. The report on (c) above shall be presented to the Planning Board at the time of site plan approval for units that would cause the total units to exceed 1,200. If deemed to be feasible by the Planning Board, after review and report by a independent hydrogeological engineer jointly selected by the applicant and the Board, then the system would be installed after approval of the subject site plan.

In the event that the 900 unit alternative is selected for development, the estimated water supply demand would be about 40% less, and thus there would be substantial positive margin between recharge and usage, and a subsurface discharge would not be deemed to be necessary.

I. ADDITIONAL DATA REGARDING PROJECT OPEN SPACE

In response to comments on the SDEIS, the following additional data is provided with respect to open space and its categorization as wetlands, steep slopes and unconstrained areas:

The 243 acre project area will have 177 acres devoted to open space. These 177 acres of open space include:

- 32.25 acres of wetlands
- 1.2 acres of steep slopes over 25% grade
- 12.7 acres of steep slopes 15% to 25% grade
- 11.8 acres of stormwater drainage detention ponds or grass swales
- 119 acres of unconstrained open space

The alternative plan for 900 housing units (described in FEIS Section I-J) would have 196 acres devoted to open space (19 acres more than the 1,518 unit plan), and 132 of these 191 acres would not be constrained by wetlands, steep slopes or detention ponds or drainage swales.

J. ALTERNATE PLAN

The Planning Board in a resolution adopted on December 9, 2009 requested that the FEIS include an Alternative Development Plan for a project of Nine Hundred (900) residential dwelling units, and a 50,000 square foot neighborhood retail and services building. A 900 unit alternative and its impacts representing an approximately 40% reduction from the basic plan as initially presented in the SDEIS are presented in this FEIS.

This Alternative Development Plan is shown in the attached map which is titled Alternative Development Plan, 900 dwelling units.

The resolution also requested inclusion of a table which would compare certain specified quantitative impacts with those of the (1,518 unit) Development Plan presented in the FEIS. The comparison table follows:

**SDEIS 1,518 Unit Project Compared to 900 Unit Alternative
(Both Include 50,000 SF Retail)**

1. AM and PM Peak Hour Traffic Generation

	<u>SDEIS Plan (Number of Vehicles)</u>	<u>Alternate Plan (Number of Vehicles / % of Original)</u>
AM	393	274 / 70%
PM	745	603 / 81%

2. Daily Domestic Water Consumption

<u>SDEIS Plan (Gallons per Day)</u>	<u>Alternate Plan (Gallons Per Day / % of Original)</u>
272,190 gpd	163,400 gpd / 60%

3. Acreage of Impervious Surfaces (roads, parking areas, and building footprints)

	<u>SDEIS Plan (Area)</u>	<u>Alternate Plan (Area / % of Original)</u>
Roads and Parking Areas	35 Acres	27 Acres / 77%
Building Footprints	30 Acres	18 Acres / 60%
Total Impervious Surfaces	65 Acres	45 Acres / 69%

4. Permanent Open Space (Natural and Landscaped)

	<u>SDEIS Plan (Area)</u>	<u>Alternate Plan (Area / % of Original)</u>
Natural Open Space (Undisturbed)	110 Acres	136 Acres
Landscaped Open Space	67 Acres	60 Acres
Total Permanent Open Space	177 Acres	196 Acres / 11%

5. Estimated Population

	<u>SDEIS Plan (Population)</u>	<u>Alternate Plan (Population / % of Original)</u>
	2,657	1,575 / 59%

6. Estimated Annual Tax Proceeds to Various Governmental Entities

	<u>SDEIS Plan (Dollars)</u>	<u>Alternate Plan (Dollars / % of Original)</u>
Town:		
General	\$ 263,500	\$ 158,900
Highway	399,300	240,800
Sparrowbush Fire District	\$ 439,300	\$ 264,900
Port Jervis School District	\$5,902,200	\$3,559,500
County	\$ 982,400	\$ 592,500
TOTAL:	\$7,986,700	\$4,816,600 / 60%

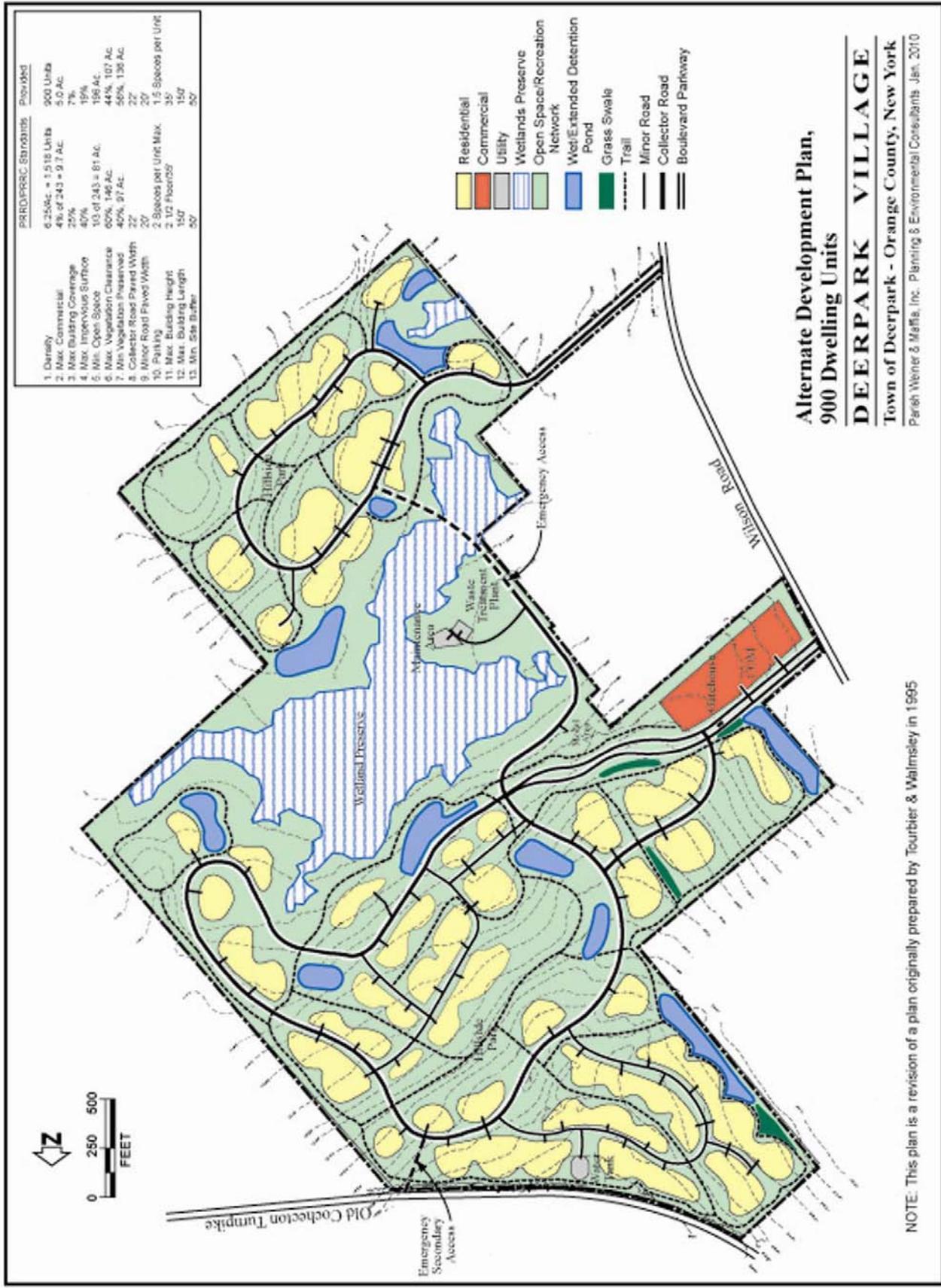
In Section I.B. (Project Description, Page I-9), year by year estimates of annual tax revenues for the 1,518 unit plan are summarized. As noted in Section I.B., it is impractical in the current economy to predict when total build-out could occur. The Planning Board’s Review Consultant, Fusco Engineering and Land Surveying, P.C., has suggested that, for a practical approach to estimating how these annual tax revenues will grow, a two-year approval/financial period should be assumed and a total 10-year period to full build-out. The annual tax revenues from the 900 unit Alternate Plan project are project as follows:

<u>Year</u>	<u>Local Non-School Property Taxes</u>	<u>School Property Taxes</u>	<u>Total Property Taxes</u>
2012	\$ 141,700	\$ 401,100	\$ 542,800
2013	281,100	795,900	1,077,000
2014	420,500	1,190,700	1,611,200
2015	559,900	1,585,500	2,145,400
2016	699,400	1,980,200	2,679,600
2017	838,800	2,375,000	3,213,800
2018	978,200	2,769,800	3,748,000
2019	1,117,600	3,164,600	4,282,200
2020	1,257,100	3,559,500	4,816,600

The applicant’s planning consultant, Parish & Weiner, Inc., has noted that such estimates will vary based on the original and national economy; also that the impacts to be generated will be similarly experienced in stages.

7. Daily Sanitary Sewage Generation

<u>SDEIS Plan Gallons Per Day</u>	<u>Alternate Plan Gallons Per Day/% of Original</u>
370,200 gpd	222,000 gpd/60%



**Alternate Development Plan,
900 Dwelling Units**

DEERPARK VILLAGE

Town of Deerpark - Orange County, New York
Parish Welter & Maffis, Inc. - Planning & Environmental Consultants - Jan. 2010

NOTE: This plan is a revision of a plan originally prepared by Tourbier & Walmsley in 1995

II. RESPONSES TO SDEIS COMMENTS

A. RESPONSES TO COMMENTS OF THE PUBLIC

Comments of the public are found in Appendices 11 and 12. Appendix 11 is a transcript of the SDEIS public hearing, and Appendix 12 contains copies of all written comments received from the public. In each of these appendices the comments have been marked with identifying numbers.

The comments, often in paraphrased format, are listed below in italics, and their sources are also noted in italics. Comments PH-1, PH-2, etc. refer to the comments identified by those numbers in the public hearing transcript in Appendix 11. Comments A-1, B-1, etc refer to comment so identified in the public hearing written comments in Appendix 12.

1. LAND USE

General Land Use and Non-Substantive Comments

A number of comments raised issues about the legal procedures involved with the enactment of the zoning ordinance, the project size, its compatibility with the surrounding residential area, and suggested that the County purchase the project for open space.

*Comments: PH-1, 3, 5, 8; E-1, 2, 10, 11, 12; F-5, 11, 12, 14, 16, 17, 53, 54;
G-6; H-1, 2, 11, 12; I-1, 2, 7; J-4; K-1, 5; L-10, 13,30(A); M₄-1, 2*

The legal issues or questions cited in several comments are not deemed to be germane to the SEQRA review of environmental impacts. The EIS examines a plan which has been developed in accordance with zoning established by the order of New York State Supreme Court Justice Peter Patsolos, issued on September 13, 1991, and the subsequent designation of the site as a PRRD zoning district by the Town of Deerpark. A more complete history is provided in Section I.A of the SDEIS (SDEIS pages I-1 to I-4). Issues with respect to the applicability of the hunting club setback requirement were addressed by Attorney Onofry's letter included in the SDEIS, as Appendix G.

The allowable size of the project is dictated by the size of the property and the allowable density of the PRRD zoning district. While the size may appear to be large, this is addressed

by the consideration of a Comprehensive Development Plan that describes and projects total development over a 10-year period, or possibly longer. In actuality, development will take place as a result of smaller projects each to be considered individually by the Planning Board. Thus, if in the absence of a Comprehensive Plan, projects averaging 150 units were to have been submitted each year over a ten-year period, there would not have been the same perception of a very large project.

It is noted that the density of development, 6.25 units per gross acre, is a reasonable density for a planned residential retirement community with homes to be developed as attached townhouse type units, or semi-attached units.

The density described and examined for the Comprehensive Development Plan is a maximum density. As each stage is submitted for site plan or subdivision approval, detailed site planning issues such as minimizing steep slope disturbance, setbacks, maximum road grades and lengths of cul-de-sacs...together with the required consideration of aggregated previous traffic and water demand generation...may, particularly in later stages of development, result in a density which is lower than the maximum permitted density.

The fact that the large property is being developed under a Comprehensive Plan, rather than having the same amount of development occur on smaller sites individually considered, will result in a plan which is more sensitive to the environment, more efficient in its infrastructure plans, and more likely to result in a community which has a self-contained maintenance and operating staff, and is adequately privately financed so that it can well maintain its infrastructure, recreation facilities and open spaces.

The SDEIS Appendix E (Letter dated 4/1/03 from Joel H. Sachs, Esq. to Erin Crotty, Commissioner, New York State Department of Environmental Conservation) includes a letter describing the applicant's extensive efforts to negotiate a sale of the property to New York State for open space. The applicant will not engage in any further efforts to sell the property for open space. However, any governmental body can, if it so wishes, exercise a right of eminent domain to purchase the site for open space or any other public use.

The 900-unit alternative plan described in this FEIS would reduce the density of development to 3.7 units per gross acre – 59.2% of the 6.25 unit density of the 1,518 unit plan described in the SDEIS. Additionally, it is noted that the 900 unit alternative plan would result in an estimated total population of 1,575 persons – 59.3% of the 2,657 persons estimated for the 1,518 unit project.

Regarding Goals and Objectives of the Town of Deerpark and Orange County Comprehensive Plans

Several comments stated that the project plan is not in conformance with the County Comprehensive Plan nor with any of the 40 goals and objectives of the Town Comprehensive Plan.

Comments: E-11; F-18; J-2; K-4; L-3, 5, 6, 8, 11, 12; M₄-2

On SDEIS pages IV-9 through IV-11, the applicant notes that the Plan for Deerpark Village is responsive to 11 of the Town Plan's 40 goals and objectives. In this same section of the SDEIS, it also is noted that a resolution adopted by the Town Board on August 7, 2006 found the PRRD development proposed for this site to be in accordance with the Town's Comprehensive Plan.

The Deerpark Village project is consistent with the following three goals and overall goals of the 2003 Orange County Comprehensive Plan.

- Promote a broad range of housing opportunities that meet the needs of all segments of the County's population, and ensure the maintenance and rehabilitation of the County's existing housing stock.
- Provision of an adequate supply of high quality water in support of the County's residential and business community.
- For all built environments of the County – including residential, commercial, industrial institutional and recreational – utilize in fill, redevelopment and new development techniques which enhance the advancement of quality communities.

Regarding Details of the Project Plan Shown on Various SDEIS Drawings

Some comments noted that stormwater retention areas shown on SDEIS Figure IV-27 (Conceptual Drainage Plan) are not shown on SDEIS Figure II-3 (Land Use Plan, Circulation and Open Space following SDEIS page II-1). Other comments indicated that: (a) the proposed sewage treatment plant (STP) is very close to neighboring residential property; (b) the project located a road through the yard of an adjacent residential property.

Comments: F-13; H-3

Figure II-3 has been revised to show the location of each stormwater retention area shown on SDEIS Figure IV-27 (following SDEIS page IV-69). The revised Figure II-3 is dated June 2008 and is shown in FEIS Section I in the sub-section titled “Revised Plan Drawings”.

The location of the STP, as shown on the revised Figure II-3 dated June 2008, is approximately 300 feet from the nearest property line and more than 1,000 feet from the nearest building on neighboring residential property. This is deemed to meet recognized standards which normally require a distance of 500 feet to the nearest residential structure.

All of the proposed project roads are located within the project site; none of these roads pass through the yard area of any other property.

Project Retail Use

Several comments asked: (a) what type of retail uses will be included in the project?; (b) how will project commercial uses be restricted to the sole use of the residents of the proposed development?

Comments: A-3; F-15; L-16; M₁-6

Regarding the type of retail uses that will be developed as part of the project, as noted at page II-4 of the SDEIS, they will be retail and service establishments “to meet the daily shopping needs of village residents.”

Regarding the patronage of the project’s commercial facilities, the adopted PRRD zoning regulations permit commercial uses “provided they are designed, planned and developed for

the sole purpose of service to the residents and guests of the...PRRC.” While the proposed commercial development meets this requirement...it is designed, planned and developed for the sole purpose of serving the project’s residents and guests...the commercial development is not precluded by the PRRD zoning from also serving customers from other areas. There is no basis for projecting that any large numbers of customers from outside areas would utilize the facility as it will not contain any large destination retail establishments. Planning Board approval or re-approval is required as per the Town of Deerpark Zoning Code, in accordance with all existing regulations.

Relationship of Project to Upper Delaware National Scenic and Recreational River

Comments claimed the SDEIS does not indicate that a portion of the project site is located within the Upper Delaware National Scenic and Recreational River Corridor, and questioned whether the National Park Service and the Upper Delaware Council were included in the SEQRA process or involved as interested agencies.

Comment: L-4

The SDEIS, at pages IV-7 and 8 and in Figure IV-3 which follows SDEIS page IV-7, includes a discussion and map description of the project’s relationship to the Upper Delaware National Scenic and Recreational River Corridor.

At SDEIS page IV-8, it is noted “that the Scenic and Recreation area is not a national park and therefore the National Park Service has not imposed federal regulations on private lands within the river corridor. Each municipality was directed to prepare land use regulations to protect the portion of the corridor within its boundaries. The Town of Deerpark has complied with its enactment of the Recreation River Corridor zone in the Town Zoning Law.”

At SDEIS page II-6, the Delaware River Basin Commission is identified as one of the agencies whose approval may be required for the proposed project. The Commission is included in the SEQRA process as an involved agency. Permits from this Commission will be required before construction can start on the first phase of development.

2. SOCIO-ECONOMIC

Regarding Resident Age Restrictions and Use of Project for Low-Income or Public Housing

Comments regarding resident age included: Do all residents have to be 55 or older? Is there a maximum age limit? Can residents' children or grandchildren live with them? Can project age restrictions be maintained over the long term – i.e., 50 to 100 years, or can they be negated or modified by changes to current laws or by future court actions aimed at preventing discrimination based on age? Is the demand for senior housing supported by demographic studies? Will the project be marketed as low-income housing if, for any reason, it is unmarketable? If there is any possibility that project units can become public units, the project's impact on the public school system needs to be considered.

Comments: PH-1, 3, 7, 12, 14; F-19; G-4; H-13

The occupancy restrictions are established in the PRRD District.

The occupancy restrictions will, upon approval of the site plan for the first stage of development, be filed as a deed restriction in favor of the Town of Deerpark and could only be amended by approval of the property owner and the Town.

SEQRA review is limited to examination of impacts that can be reasonably assumed to occur. Thus, it is neither required nor possible to comment on hypotheses questioning what governmental laws or court actions might be over a 50 to 100 year period.

The economic basis for the plan was based on a market study which was discussed in Section II.C of the January 1996 DEIS (pages II-5 to II-7). In any event, the project would be developed in stages and the developer would not initiate construction of any stage unless there had been sufficient demand demonstrated in the sales program for the prior stage.

The project cannot be developed, marketed or converted to any uses other than those permitted in the PRRD Zoning District, i.e., the uses presented in the Comprehensive Development Plan which is examined in this EIS.

Project's Tax Payments and its Social, Environmental and Economic Impacts

- *The project's social, environmental and economic impacts need to be reduced or eliminated to maintain the quality of life.*
- *It would be preferable to preserve the site as open space.*
- *Up to 30% or more of the project's 2,657 residents could be much younger than 55 years of age, and thus the project could generate more demand for police and emergency services than noted in the SDEIS.*
- *The SDEIS notes that police patrolling of the 1,518 units will not be necessary. Will this be a gated community? Will private security services be provided? And if provided, this will increase monthly fees and will work against the objective of providing "affordable housing".*
- *Estimates, in SDEIS, of property taxes to be generated by project may be inaccurate because of following factors that could lower property tax revenue:*
 - *Impact on property tax of Star Program and Enhanced Star Program and partial tax exemptions for military veterans.*
 - *Proposed changes in local property tax that are being currently legislated to fund schools.*
 - *Legal challenges to the constitutionality of using property tax to fund schools to foster more equal funding throughout the State.*
 - *Marketing all of the units may require more than 10 years because there are 3 other large age restricted projects under review in Orange County.*
 - *The project may be subject to having its age restrictions overturned by a successful challenge of their constitutionality.*
 - *The applicant may seek to remove the age restrictions if the units are not fully marketable in this form.*
 - *The applicant or the community association may seek to lower the Town's assessment.*
- *How would the project's assessed value and its age restrictions be impacted if the applicant were to use federal or state funding of some type, such as for the issuance of low interest government backed bonds in exchange for the project setting aside a certain percentage of the units as affordable under federal or state guidelines? Can the SEQRA approval for this project (i.e., the SEQRA Findings statement) include an enforceable provision prohibiting such government financing?*
- *Tax generating capacity of the project should be studied using a mathematical concept called "casino modeling", which will provide a range of possible tax revenue generation over time.*

- *Tax revenue generation tables should “compare potential tax revenue generated by the project against any increase in demand for services and off-site capital improvements.”*
- *The project’s growth inducing impacts may foster more residential development in nearby areas of the Town and this growth will result in property tax rate increases “far greater than the rate of inflation”.*
- *Will the estimated property tax revenue from the project’s commercial development be impacted by the PRRD zoning requirement that commercial uses are permitted “provided they are designed, planned and developed for the sole purpose of service to the residents and guests of the PRC or PRRC,” since this limits its customer base, and may also cause it to never be economically feasible to construct?*
- *What are the broad social impacts of such a large community of all households of older people? How does it impact the labor pool? Will these older residents fill volunteer positions in the Fire Department and Ambulance Service? Will the project residents feel, or actually be, isolated in a remote area? What will be the impact on the communities they will be moving from?*
- *The SDEIS overstates the project’s property tax revenues and underestimates the cost of service in stating there are no negative tax impacts. Based on a 33% increase in Town population, the Town police force will have to add at least one full time and four part-time positions at an estimated cost of over \$400,000 annually, which exceeds the DGEIS estimate of \$263,500 for General Fund recovery from the project.*
- *In response to the 33% population increases, the fire departments would need to add about 26 active and 33 volunteers, and would need to add capital expenditures for additional firefighting equipment.*
- *The project will lower property values of nearby properties.*

*Comments: PH-1,3,7; E-3; F-20,21,22,23,30,47,48,49,50,51,53,54;
L-64,65,66, 67,68,70,74; M₄-3.*

The developer made a vigorous and diligent effort to determine the State’s interest in purchasing the property as an addition to the Mongrup Preserve. The effort was unsuccessful and is described in Appendix E of the SDEIS (Letter dated 4/1/03 from Joel H. Sachs, Esq. to Erin Crotty, Commissioner, New York Department of Environmental Conservation).

No basis is provided for the assumption that 30% of the residents will be younger than 55. However, it is assumed that there would be no significant increases in demand for police and emergency services from adults who may be slightly younger than 55, e.g., spouses of those over 55. In fact, if anything, the contrary may be true.

This will be a gated community which will have an on-site private security service.

The estimates of tax revenues to be generated by the project are deemed to be reasonable based on current statutes and regulations. A SEQRA analysis is not required to examine hypothetical alternatives which would assume unforeseen changes in laws or court decisions over a long period of time.

The State STAR Program and Enhanced STAR Program are revenue neutral to local taxing jurisdictions. They do not reduce the amount of tax revenue collected by local taxing jurisdictions.

It is anticipated that Veterans tax exemptions that may be claimed by Deerpark Village residents will not significantly impact total property tax revenue paid by the project because: (1) relatively few households are expected to be eligible; and (2) those that are eligible receive only partial exemption and school taxes generally are not eligible for exemption.

If market conditions require a longer build-out period this would delay the achievement of the total property tax return estimated in this EIS. However, it would also delay the generation of any public service impacts that would need to be addressed. It is assumed that an average absorption of 120-150 dwelling units per year is a reasonable estimate.

No governmental funding of any type is proposed or anticipated. If any such funding sources were to be contemplated in the future they would normally require some form of Town approval at which time their impact would need to be examined. The Town will not be responsible for any costs and a developer's agreement at the time of site plan approval will confirm same in writing.

The commercial development is scaled to a size which would meet the convenience retail and service needs of the community. Thus, its economic feasibility is assumed in the tax revenue projection.

The methods used for estimating tax revenues in this EIS are consistent with those normally included in SEQRA studies.

There is no basis for the comment's assumption of future police force needs. The comment fails to take into account the private security system and personnel which will sharply reduce the number of police calls.

The impacts on the Sparrowbush Fire District are mitigated by the \$439,000 of additional annual revenues that would be provided to the District at full project development.

It can be reasonably anticipated that most of the new residents will be retirees, a number of who would be willing and interested to be volunteers for the Fire District and Ambulance Corps with proper qualification or volunteer for other community services.

There is no basis for assuming that this project would have growth inducing impacts which would foster more residential development in nearby areas of the Town. The Deerpark Village community sanitary sewer and water plants to be developed will not have the capacity to serve other areas, and no such hook-ins are anticipated, and are thus not provided for in this SEQRA review. The only exception is for nearby homes in the event that their wells have excessive impacts as a result of this project. In such instances, those homes would have the opportunity to hook into the project water system.

The commentor provides no basis for asserting that property values will be lowered in the surrounding areas.

- *The following chart compares the estimated annual property tax proceeds to various governmental entities for the 1,518 unit SDEIS project and the 900 unit alternative described in Section I-J of the FEIS. As shown below, the tax revenues generated by the 900 unit alternative would be approximately 60% of those generated by a 1,518 unit project.*

	<i>SDEIS (Dollars)</i>	<i>Alternative (Dollars % of Original)</i>
<i>Town</i>		
<i>General</i>	\$ 263,500	\$ 158,900 / 60%
<i>Highway</i>	399,300	240,800 / 60%
<i>Sparrowbush Fire District</i>	439,300	264,900 / 60%
<i>Port Jervis School District</i>	\$ 5,902,300	3,559,500 / 60%
<i>County</i>	982,400	592,500 / 60%
<i>TOTAL</i>	\$7,986,700	\$4,816,600 / 60%

Additional Comments or Questions Regarding Socio-Economic Impacts

- *Based on 2000 census data, there is a 13% vacancy rate in housing, town-wide. This indicates a housing surplus, not a housing need.*

Again based on 2000 census data, 91% of the Town’s owner occupied units were valued at less than \$200,000. This indicates that there is no need for “affordable” senior housing at an average price that will exceed 91% of existing owner occupied housing.

The modest growth in the Town population over 55 years of age does not warrant the proposed project of 1,518 units of senior citizen housing.

The number of proposed units is much greater than the growth in the Town’s housing units in the 1990-2000 ten year period and considering that all the proposed units will be for senior citizens, the Town must consider the drain on resources such as: Meals on Wheels; Healthcare, hospitals, physicians and emergency care services; public transportation; and handicap accessibility.

It is hard to imagine why a 1,518 unit housing development is needed, or how it is economically feasible.

- *Is the applicant aware that there are 3 large senior housing projects in the planning stages in Orange County? Has the applicant conducted a study of the number of units similar to those proposed for this project within a 60 mile radius multi state area, identifying those that are existing, under construction, or in the planning stage? How might an oversupply of these units impact the construction rate and financial viability of the Deerpark Village project?*
- *At the SDEIS public hearing on 7/25/07, the applicant’s representative indicated that “we think it will be condominiums” in reference to the project’s residential units. “The type of ownership of the units is critical to estimate the assessed value of the project for property tax purposes, as well as to consider other possible impacts from different forms of ownership.”*

Comments: F-19; L-9,69

While it is anticipated that some current Town residents will be interested in moving into Deerpark Village, its economic feasibility and market potential is not predicated on any assumptions related to the demographics of the Town's current housing supply. This is planned as a self-contained retirement community which will have many on-site recreational facilities, central maintenance of grounds and infra-structure, and will take advantage of the numerous outdoor recreation resources of the area, as well as nearby cultural facilities and entertainment complexes. As such, it is intended to be an attractive housing resource for many senior households in Orange County, Ulster County and other areas of the region for those who want to sell their larger homes and live in a community where homes will be of modest cost as compared to other housing options, and which is designed and operated to meet the needs of senior households. It is not intended to meet the needs of low income households, nor of those who would initially need the type of services typically offered in assisted living facilities. However, all dwelling units will be designed to meet, and in some instances exceed, American Disability Act (ADA) requirements for persons with serious physical disabilities.

It is also important to note that the community will be built in stages which would average development of 120-150 units per year. Thus, market conditions will determine the pace of development which, of course, could be affected by any competitive developments that may emerge.

At this time, there is no known similar retirement community in the active planning stage in this area. The project is designed so that no particular stage is dependent on a subsequent stage other than the installation of infrastructure in an early stage which will, in part, also serve later stage development.

No final decision has been made as to the form of ownership. This will probably be developed as a condominium, or may be developed with fee simple lots and common area and facilities owned and operated by a homeowners association. The tax revenue estimates provided are deemed to be reasonable for either form of ownership.

3. WATER SUPPLY SYSTEM

Well Testing Program

Comments by some area residents noted they were not asked to participate in the well testing program. Another commentor asked, "Why were homes on the east side of Wilson Road, but not any on the west side, contacted to participate in the well testing program?"

Comments: PH-1, 3; D-3

The homes that were selected for the monitoring program were selected on the basis of proximity to the test wells and the availability of the names and addresses on the then current tax map for the area. Homes within 1000 feet of the test wells and included on the tax map were sent letters requesting their participation in the monitoring program.

Comments noted that during the project's well testing program, one of the existing area wells that was being monitored had a 15-foot drawdown, and then recovered when they stopped pumping the project wells; that is not acceptable. Another existing well is reported by hearsay to have gone dry and that is not acceptable. Other residents stated they did not participate in the well testing programs but experienced a 20 foot drop in water level.

Comments: PH-6, 7; H-6

The private well that had a 15-foot drawdown during the test was the Winschuh well. Careful examination of that well chart will reveal that other than the 15 foot drawdown during the test period, no other impacts are visible to the well, not even the effects of the Winschuh's own pump installed in the well. This means that the Winshuh well is a high yield well that is directly connected to the same aquifer [bedrock fractures] that feed at least one of the project wells. A fifteen foot drawdown in a well like the Winshuh's well will have no adverse impact to the use of that well since the owners own usage of that well is limited to less than one foot. On the other hand, lower yielding wells, wells that are more typical of private wells, are less connected to the area aquifer since conductivity to the aquifer and, therefore, has a lower well yield. Such wells will not see the same degree of impact that the Winschuh well did.

We have no information concerning a well “reported by hearsay to have gone dry”. Although it is possible that a well could go dry, it is very unlikely that the well went dry due to the pumping test.

If such testing indicates the project water system will cause the failure of an off-site well, the project will formulate and implement, at its own cost, an appropriate remedy to make the affected property owner whole by assuring the availability of an adequate water supply.

The mitigation plan is described in further detail on page IV-81 of the SDEIS and in Section I.F.8 of this FEIS.

Chlorinated Water

Area residents commented that they now have a good unchlorinated water supply from their own wells. If their wells will be significantly impacted by the project, they do not want to have to accept the project’s chlorinated water as a replacement of their unchlorinated water.

Comments: PH-7, 11; D-3; H-7

In the event that the project water supply will be found to have an unpleasant chlorine after-taste, a charcoal filter will be installed at each of the residences where this problem may be experienced.

The alternative of reduced units may preclude the necessity of supplying project public water to surrounding properties.

Pumping Test, Recharge Analyses and Drinking Water Impacts

The following comments were made regarding the pumping test, the recharge analysis and drinking water impacts:

“The pumping test was conducted almost three years ago in December, the month of the projected highest well recharge. The test shows substantial drawdown of surrounding wells. The evaluation fails to provide an analysis of peak use and adequate supply. In fact, the projected use exceeds the projected recharge rates during some months of the year.”

Twenty (20) new homes have been built on Wilson Road since the pumping test. A new water test should be conducted “under peak use conditions in the month of lowest recharge.

“The recharge analysis may have overestimated the actual recharge capabilities with an assumption of only 20% lost to runoff. In their analysis of storm runoff, the Applicant concluded that paving with hard surfaces would not overly increase the runoff based on the soil characterization of “D” (high runoff). There appears to be an inconsistency between the methodologies used for estimating recharge (low 20% runoff) and storm runoff (soil with high runoff). Each of the separate analyses of these favor the Applicant but neither is consistent with the other.

“A new pumping study should be performed in the summer (estimated time of lowest recharge) with monitoring of neighboring wells. The current data is out of date (almost 3 years). Since that time, almost 20 new households have been added to Wilson Road.

“Peak residential demand was not considered and should be included in any analyses. Considering that an individual unit should have a water well that yields 5 gpm to meet peak (sic) and daily needs (NYDOH Bureau of Water Supply Protection Fact Sheet #2), this would translate to a requirement for 1,518 units of well capacity of 7,590 gpm to accommodate peak use (twice as much as the estimated yield, even under the best of circumstances).

“The pumping study that was conducted during the peak recharge month, showed that...some of the monitored wells (either one of the project test wells or a neighboring well) had substantial drawdowns. The pumping study should use all the wells simultaneously and be longer to mimic the actual use that would meet the estimated peak demand (not average demands) of the proposed development.

“A new lab analyses of well samples should be from samples taken at both the beginning and the end of the pumping test (not months later) to better characterize the effects (if any) of the drawdown of the wells that occur.

“The estimated per unit usage seems to be underestimated and should be revised. The NYDOH reference is based on a household with ‘moderate’ water use, but does not account for lawn and landscape watering, spa and pools, etc. Other data suggest a per person gpd higher than the factor utilized by the study. The actual projected output of the wells and the estimated requirements leave little room for error.”

The well pumping test should be done with all project production wells in operation at the same time, and should be repeated during different times of the year.

Comments: B-6; F-33, 34, 35, 71; L-25

The recharge analysis used for this project was based on a model (created by a Cornell University climatologist) that attempts to take into account the varying evapotranspiration rates for any given time during the year. Evapotranspiration is the largest single component in the analysis during warm weather months. This parameter is the amount of possible recharge that is lost due to either direct evaporation into the atmosphere or by way of plant take-up and subsequent evaporation to the atmosphere. This process, obviously, is reduced during the cold weather months when direct runoff becomes a more important factor. In fact, direct runoff is reduced by actively growing plants. Another factor that affects the amount of runoff is the nature of the precipitation. Downpours, such as in thunderstorms, tend to produce higher percentages of runoff while snow will have less runoff since typical snow melt is a slow process.

According to information provided by the Town of Deerpark Building Department, a total of six (6) building permits for new homes on Wilson Road were issued for the 4-year period of 2004 through 2007. This small increase in the number of homes on Wilson Road indicates virtually no change in the water demand in this area during the 4-year period.

The reason why winter recharge rates are higher is more due to the lower evapotranspiration rates than the greater precipitation rates in the winter. In fact, during a cold and/or snowy winter, aquifer recharge could be close to "0" as long as the temperature remains below freezing. The table does not take this particular factor into account since specific climatic affects can not be easily quantified. Additional investigation of some subsurface disposal of treated sanitary waste can assist in additional recharge. This is discussed further in last portion of Section I-H of this FEIS.

Wells tapping bedrock fractures, contrary to popular beliefs, are not effected by short term climatic changes other than a rising and lowering of the static water level in the well of a few feet, typically less than 20 feet. The well hydraulics do not change; the size of the fractures, the extent of the fractures, do not change and, therefore, the well yields do not change. What changes predominantly with seasonal changes is not the productivity of the well but the amount of usage

of the well. Typical homeowners tend to use more water in warm weather. The estimates given for this project take into account seasonal water usage.

The Department of Health uses average daily demand as the bench mark for well analysis. Average daily demand is the typical amount of water used over any 24-hour period. This is an average that must be met with a significant margin [twice average daily demand with the best well out of service]. Peak demand, on the other hand, is a short term quantity that is based on the maximum water usage during peak periods. The peak demand is met by engineering rather than geology. The project must supply sufficient water storage to meet the peak demand, which also includes fire suppression requirements.

A typical private home, with 4 bedrooms, uses about 425 gallons per day, based on NYSDOH guidelines. Four hundred twenty-five gallons per day translates to 0.29 gallons per minute [over a 1440 minute day]. The 5 gpm rate that is suggested by the DOH includes the peak demand rate for a typical private home.

The pumping test that was completed for this project meets the NYS Department of Conservation requirements and rerunning the test will not serve the desired goal of the commentators. A better process is to run a long term monitoring program that monitors private wells during the actual use of the Deerpark Village wells. The long term monitoring program will better address possible impacts to private homes. The monitoring program has been detailed in the “Well Monitoring Agreement and Program” in the SDEIS Appendix C – see pages 1 to 4.

The New York Subpart 5.1 specifically lists the parameters that need to be tested for a community water system. The subpart 5.1 also requires that the water sample be collected at the end of the 72 hour pumping test. If supplemental samples are required, such as in the case of lab error that requires re-sampling of the well, the well must be pumped sufficiently to assure that all water stored in the well is removed from the well before the water sample is collected. Neither the NYSDEC nor the NYSDOH requires that a set of water samples be collected at the start and finish of the pumping test. The extra set of analysis would provide no usable information that would justify the additional costs.

The following chart compares the estimated daily domestic water consumption for the 1,518 unit project described in the SDEIS and the 900 unit alternative described in Section I.J of this FEIS. The alternative plan would result in a daily demand that is approximately 60% of the demand generated by the 1,518 unit project.

SDEIS (Gallons Per Day)	Alternative (Gallons Per day / % of Original)
272,190 gpd	163,400 / 60%

The alternative would reduce drawdown affects on several of the adjacent off-site wells. This may be accomplished by transferring one of the proposed project production wells to emergency back-up use..

Additional engineering and reporting will be necessary to the Orange County Health Department for a public water supply permit.

A commentor suggested the recharge analysis in the SDEIS should utilize rainfall figures for areas closer to the site than Middletown, Harriman and Poughkeepsie.

Comment: F-71

Middletown, Harriman and Poughkeepsie were the closest sources of long term climatic data available at the time. The average of the three sources of data is deemed to be sufficiently close to the climate of western Orange County.

Another commentor asked how the long-term operation of the project wells will impact the existing wetlands and existing water flow in John Woods Brook?

Comment: L-25

The Deerpark Village water system uses bedrock wells that have static water levels that are well below the level of surface water bodies showing that there is not direct connection

between the surface water and the ground water. Wells will be designed to exclude surface water intrusion by casings and grout at the bedrock depth.

Another commentor posed the following questions:

- *How will the site disturbance affect the existing aquifer recharge rate?*
- *Considering impacts on stormwater runoff from lawn care chemicals and pesticides, oil spills from automobiles, pet waste, car washing detergents and the impact of the discharge of sewage treatment plant effluent to John Woods Brook – how does the developer plan to mitigate and prevent the contamination of the existing underground water resource?*

Comments: L-25,33

The best management practices which are being applied to the stormwater management of the overall site development mitigate the impacts which site development have upon groundwater recharge. All of the stormwater quality practices provide for groundwater recharge of the 90th percentile storm event.

The best management practices proposed, and as required by NYSDEC for the site stormwater management give consideration to these types of common pollutants. The recent DEC regulations, to which these improvements will be designed, provide water quality measures which are intended to treat these pollutants prior to the stormwater being discharged off-site.

The aquifer recharge rate was computed taking into account the creation of impervious areas (roads, buildings, etc.). The computed recharge rate exceeded the amount of project water demand. At the end of Section II.H there is a description of consideration of some subsurface disposal in the event project demand exceeds that which was estimated.. Also, the alternative of 900 units would reduce the required recharge.

Radon and Other Test Results

Other comments inquired about radon levels found in the water tests of the seven project production wells, and suggested that the data on the test results of all seven wells be presented in summary tabular form for all test parameters.

Comments: L-25, M₂-12

Table I-7, included in Section I.G of this FEIS (at page I-67), summarizes the test results for the project's seven production wells with respect to inorganic, organic and radiological parameters. The table identifies the applicable standard for each tested parameter, as well as the test results for each of the seven wells. The radon results are included in the radiological parameters. The table shows that the water supply will meet the requirements for a public water supply.

Perchlorates

Other comments noted that blasting agents commonly contain perchlorates which can become a dangerous groundwater contaminant by escaping into bedrock fractures from the boreholes used to place the charge. These comments asked whether blasting activity required for project development could create new "vertical pathways of contamination into the bedrock aquifer, and whether these pathways and the altered stormwater runoff characteristics (of the project) could cause the aquifer to become contaminated."

Comments: M₁-3; M₂-12

One of the comments states that "blasting agents commonly contain a chemical known as perchlorate". In actuality, there are a variety of blasting agents that do not use perchlorate as noted in the recommendations below.

The state of Massachusetts has the performed the most research in the country with respect to perchlorate contamination in water supplies. The report cited in the comment went on to note other sources of perchlorate contamination in Massachusetts – fireworks, military munitions, hypochlorire (bleach) solutions, and some industries. A 2005 report by GeoSyntec Consultants entitled "Alternative Causes of Widespread, Low Concentration

Perchlorate Impacts to Groundwater” also noted safety flares and Clilean nitrate fertilizers as widespread sources.

While perchlorate in groundwater can be a concern it is not a reason not to blast as noted in the following guidance listed in the Massachusetts DEP website <http://www.mass.gov/dep/cleanup/laws/blasting.htm>.

Although the environmental impacts from the use of perchlorate-containing blasting agents and explosives have not been fully defined, MADEP believes it is prudent for contractors to take the following reasonable steps now to minimize potential problems in this regard:

1. **Determine the perchlorate content of blasting agents and explosives to be used.** This may require that you make inquiries with your suppliers and/or manufacturers.
2. **To the extent practical, avoid the use of perchlorate-containing explosive products when surface or groundwater can be affected with particular attention:**
 - o Within and adjacent to the recharge areas of public drinking water supply wells (i.e., Zone II and Interim Wellhead Protection areas), and within and adjacent to the sensitive watershed areas of public drinking water supply reservoirs (i.e., Zone B areas). Maps of these areas should be available from local officials, and can be viewed on-line at <http://www.mass.gov/mgis/>
3. **When the use of perchlorate-containing products is necessary:**
 - o **institute rigorous "housekeeping" practices.** Some sources suggest that explosive products that are properly detonated will result in the nearly complete destruction of perchlorates, and that loss of product via spills or debris are the primary cause of environmental pollution.
 - o **take reasonable steps to prevent and address misfires.** In cases where explosives or blasting agents are washed or removed from a borehole following a misfire, reasonable efforts should be made to collect and properly manage or dispose of perchlorate-containing materials. In all cases, the safety of workers and the general public is of paramount concern.

The Applicant will ensure that if blasting is necessary that the blasting contractors will adhere to these recommendations.

Blasting would be a method of last resort and all Town mandated procedures would be adhered to.

Fire Fighting

Comments questioned how the project's water supply system will meet fire fighting requirements.

Comments: F-36; H-8

The water system proposed for this project includes two (2) pressure zones, one to service the areas in higher elevations and one to service for lower areas. The majority of the site is served with domestic service by the 400,000 gallon water storage tank, which is equivalent to one day's worth of storage. The area serviced by the high pressure zone will be fed by a booster pump station and a 50,000 gallon storage tank. This booster pump station will be equipped with a fire pump suitable to meet the needed fire flow for the community.

Insurance Services Office (the organization referenced by 10 State Standards) and generally accepted as the fire flow calculation methodology, requires that for fire flows of 2,500 gallons per minute or less, a duration of 2 hours is necessary. A 2 hour duration at a fire flow of 2,500 gpm equates to 300,000 gallons. The overall site development will contain approximately 450,000 gallons of fire protection storage.

Estimated Water Consumption by Proposed Commercial Uses.

A comment stated that a source should be provided for the 0.1 gpd/SF estimated usage noted for the 50,000 SF of commercial space.

Comment: F-71

The estimated water demand utilized in the water demand calculations of 0.1 gpd/SF is a value often utilized, and generally accepted in the engineering profession for large commercial/office/industrial buildings, when the specific tenants are unknown.

Additional Comments re Water Supply

- *Area residents are concerned that the project's wells will draw water away from their wells and adversely impact the ability of their wells to meet their own water needs.*

Comments: PH-1,3,7; H-5; I-3; K-2

Mitigation measures addressing these concerns are described in Section I.F.8 of this FEIS (see page I-54), in the sub-section titled “Mitigation Measures”.

- *If I sell my home, will the project offer all subsequent new owners the same protection it offers current owners from project impacts on their well: i.e., if the project causes their wells to no longer provide an adequate supply of water, will they be able to choose to have the project either improve their well or add them to the project water supply system?*

Comments: PH-11; G-1

Yes, the agreement will extend to whoever happens to be the owner of the property at the time that the impact is noted or the procedures proposed.

- *“A better recharge analysis of the groundwater wells should be performed.*

“The generic recharge analysis is inadequate and purely a paper exercise based on assumptions of total rain and estimated runoff, with the remainder all available for recharge of the aquifer.”

- *“A detailed and unbiased site-specific model of the existing aquifer and its recharge capacity needs to be done by a professional hydrogeological firm independently contracted by the Town Planning Board, and reimbursed for by the applicant. This may require many test borings to determine the underlying geology accurately. A maximum amount of water that can be pumped from the wells of the project needs to be set at a limit that doesn’t negatively impact the wells on the adjoining properties. An allowance for increases in demand on adjoining and nearby properties needs to be included.”*

Comment: F-71, L-25

The analysis was performed by a qualified professional hydrogeologist. Before occupancy of any units, permits will be required to establish that for the next stage there will be sufficient water availability meeting quality standards.

- *The SDEIS notes that the project will be built in stages, at a build out rate of approximately 150 units per year and each stage will be subject to its own site plan and/or subdivision review and approval. The SDEIS further states, after the first few years, evaluation of the water system’s adequacy will be based on records of actual water usage by earlier stage residents as well as the long-term performance records of the operating wells. These two statements may be contradictory. The “first few years” could mean the first 3 to 4 years of a 10-year period, which would mean after up to 600 units are built. It could mean that as the rest of Wilson Road may be developed, the first five households tested in 2004 become the benchmark against which impact and remedy will be measured. The meaning of these statements in the SDEIS should be clarified.*

Comment: F-71

As each stage is proposed for development, there will be a consideration of well performance and the demand to be generated by the subsequent stage.

The Planning Board will review well performance and system demand, well drawdown, etc. and consider same at each stage.

- *“Another way to mitigate the amount of water required would be to have a dual water system and recycle the septic effluent that has received tertiary treatment -- to use for applications that don’t require potable water, such as the flushing of toilets and urinals, irrigation for lawn and landscaping, washing of cars, buildings and sidewalks, and other similar uses.”*

Comment: L-25

This approach has not been found to be feasible in geographic areas where the secondary system would not be sufficiently used during the colder months. However, the building systems will include state of the art water saving devices in order to reduce sanitary sewage effluent.

4. STORMWATER MANAGEMENT SYSTEM

Broad Parameters of the Project Stormwater Management Plan

- *Surface stormwater management plan must provide “that the rate of runoff from the site including that attributable to the Sewage Treatment Plant (STP) effluent will be the same or lower during and after development as it is under present conditions.”*

- *Other comments expressed concern that the project would worsen stormwater runoff and flooding at various locations, including: Route 42; Forestburgh Road; Wilson Road; and Wilson Road properties near Route 97.*
- *How will the project's discharge of stormwater runoff and STP effluent impact downstream flooding?*
- *Can existing road culverts handle the runoff volumes that will be generated by the project?*

Comments: PH-2, 4, 5, 7, 9; B-1; D-1; F-43; H-9; L-7, 50

The anticipated sewage treatment plant discharge is approximately 370,000 gallons per day, based on the proposed demands associated with the development. When this flow rate is analyzed in conjunction with the stormwater management plan, it correlates to a discharge of 0.57 cfs (cubic feet per second).

The stormwater management plan for the development will mitigate any increase in stormwater runoff discharge rates by detaining the required volumes on site and releasing stormwater at a rate equal to or less than the pre-development conditions. The rates of discharge for the drainage area, to which the wastewater treatment plan will discharge is 193 cfs for the 10 year storm event. The sewage treatment plant discharge represents 0.3% of this discharge.

All runoff leaving the project site will be maintained to pre-development rates of discharge for design storms up to the 100 year frequency events. No impacts to downstream structures will be realized as the rate of runoff will be maintained. All existing drainage structures downstream of the project will continue to function as they do under the current conditions.

The project will use low impact development designs and best practical methods for stormwater treatment. Under new NYSDEC regulations this includes stormwater treatment at source, not just end of pipe. The specific design proposals will be included in a Stormwater Protection Plan to be submitted with each site plan approval application.

For additional discussion regarding the need to upgrade the culvert carrying John Woods Brook under Route 97, see FEIS Section I.F.17 (page I-63) and FEIS Section II.B

(“Responses to Comments of Planning Board Consultant and Governmental Agencies”). Particularly see the responses to comments GG/PSMR-12 and GG/PSMR-14 at FEIS pages II-90 and II-93.

Water Quality Controls Applicable to Project Stormwater Runoff:

- *Do current regulations require the treatment of stormwater runoff, from a new development, before the runoff enters a wetland? What are the parameters of the required treatment? How will the wetlands be impacted by the addition of the project’s STP effluent?*
- *The SDEIS should include more detail, indicating which of the five different types of stormwater detention ponds and which of the various filtering methods will be used at each of the proposed detention pond sites.*
- *What are the contaminants that will be removed from collected stormwater runoff before it leaves the site, enters the wetlands or is allowed to infiltrate the underlying aquifer?*
- *Has the stormwater contamination from hydrocarbons, lead, zinc, copper, chrome, nickel, phosphorants, nitrogen, road salt, total suspended solids, and bacteria coming from lawns and parking areas been assessed? How will these contaminants be removed from stormwater runoff?*

Comments: L-38, 43, 44

In accordance with NYSDEC requirements, all runoff associated with the 90th percentile storm event (all events with up to 1.1 inches of rainfall) will pass through water quality measures prior to being released from the site. All discharges into the wetland area, or tributary to the onsite natural drainage way will have passed through water quality controls.

The drainage plan prepared for the project (Figure iv-19) identifies the location of the type of stormwater management features proposed to manage stormwater for the project. The features primarily include vegetated swales and wet extended detention ponds.

The water quality measures are designed to reduce the concentrations of suspended solids, nitrogen, phosphorus, bacteria and thermal impacts.

As summarized in the following chart, the 900 unit alternative plan described in Section I.J of this FEIS would result in an approximately 31% reduction in the area of impervious surfaces compared to the 1,518 unit SDEIS project. This reduction in impervious surfaces would reduce the total stormwater runoff volumes generated by the project.

	SDEIS (Area)	Alternative (Area / % of Original)
Roads and Parking Areas	35 Acres	27 Acres / 77%
Building Footprints	30 Acres	18 Acres / 60%
Total Impervious Surfaces	65 Acres	45 Acres / 69%

Following the Town Board’s adoption of an EIS Findings Statement and its approval of the PRRC Development Plan for the overall Deerpark Village project, the applicant will prepare and submit for Town approval a detailed site plan for the first stage of development; separate detailed site plans will be prepared and submitted for approval prior to initiating construction of any subsequent stages. Among the elements included in each detailed site plan will be detailed construction plans regarding the stormwater management components included in that stage of development and needed to serve the impacts of that stage.

Detailed Plans

The SDEIS does not provide any detailed plans of how stormwater will be managed to avoid adverse impacts on John Woods Brook and the Delaware River from pollutants normally carried by stormwater runoff from developed areas.

Comment: PH-13; F-43,44; L-34,45,52; M1-5

The project water quality controls, as required by NYSDEC, will mitigate potential impacts to the Delaware River and its tributaries.

Stormwater Detention Ponds

- *What is their depth? And, for how long will they retain water?*

- *If they expose the groundwater table, will the increased rate of evaporation affect the bedrock aquifer?*
- *If there is standing water in these ponds, how will this impact public health with respect to mosquitoes, the possible spread of water borne diseases and odors?*
- *How will the ponds be vegetated if they are dry part of the time?*
- *How will assurance be provided that any of the retention ponds will not overflow or cause flooding on off-site properties?*

Comments: L-43, 45

The wet extended detention ponds will have a wet pond which will maintain a relatively constant water surface elevation. Above that elevation storage is provided to mitigate the increases in peak rate of runoff. The volume of water stored during runoff events will be discharged over a period of 24-36 hours after the rain event. The specific depths of the pond will vary based on the detailed design and topographical features at each site location. Generally speaking, the wet pool portion of the pond will be 6-8 feet in depth.

It is possible that excavation for the ponds could expose the seasonal groundwater table, however, the seasonal groundwater table is not the same as a bedrock aquifer where the existing water supply wells may draw from.

The wet ponds have a normal pool water depth of 6-8 feet. Generally, the concerns related to stagnant water and water borne diseases are found in shallow areas which remain stagnant for extended periods.

The ponds will be vegetated with a variety of plantings dependent on the anticipated water levels and location. Generally, the ponds are planted with vegetation in three zones, one for full inundation, one which will have recurring inundation and one which will be rarely inundated. Species compatible with these conditions are selected accordingly.

The modeling of the stormwater events up to the 100 year storm events has been completed for the developed site. Each pond is designed to accommodate the 100 year storm safely

without flooding or overtopping. Discharge rates from the ponds will be mitigated to pre-development rates.

Other Questions/Comments Pertaining to Stormwater Management

- *How are the overflows of the detention ponds in Drainage Area I being directed?*
- *Have pre-development tests of stormwater runoff been done?*
- *Have actual stormwater runoff measurements been taken at John Woods Brook to determine if the calculated pre-development runoff figures in the SDEIS are correct?*
- *Does the stormwater management plan take into consideration the speed of post-development runoff?*
- *How will thermal contamination of stormwater runoff be addressed?*
- *Why is the design for water quality control in stormwater detention ponds based on a 24-hour duration 1.1 inch Type III distribution storm while the design of the ponds for water quantity is based on the 100-year storm event?*
- *Is the applicant aware that three recent area storms in less than a two year period exceeded the 100-year storm model?*
- *In the past, how many area storms exceeded the 24-hour duration 1.1 inch Type III storm? Is this Type III storm event an adequate design parameter for this area?*
- *A major reduction in the density of this project would serve to greatly alleviate its impacts on the issues related to stormwater.*

Comments: F-43; L-36, 37, 38, 39, 40, 46, 47, 48,53

Discharges from all stormwater features will be directed to the same natural drainage ways where the runoff is collected under the undeveloped condition. All runoff patterns which exist under current conditions will be honored during the site development.

The pre-development (and post-development) stormwater runoff has been analyzed utilizing accepted engineering methods including statistical rainfall and storm duration and intensity data for the region. The analysis predicts rates of runoff based on both the statistical data and the existing (or proposed) topographical conditions. The model is based on this rainfall distribution of the entire watershed. It is extremely difficult to compare an actual storm

event which may not exactly mirror the analytical model. The engineers who designed the project stormwater management system relied to a degree on the research, development and statistical data collection which is the basis for creation of the stormwater model.

The stormwater plan is currently developed for the entire project. However, the features proposed are individualized by drainage areas and regionalized areas of development, permitting construction of the infrastructure and development over time.

The quantity controls proposed and as required by NYSDEC regulations account for discharge velocities of the runoff which is released from the proposed facilities. All runoff leaving proposed facilities is analyzed to determine the discharge velocity (speed) and appropriate erosion control measures are then included in the design of the receiving channels to account for the velocities. In the event where discharges are made to natural watercourses, discharges are designed such that velocities will not create unstable conditions.

The use of wet extended ponds and open drainage swales provides mitigation for the thermal impacts.

Water Quantity controls are proposed for the design storms including 1, 2, 10, 25 and 100 year frequencies. The outlet controls of the detention ponds are designed to mitigate increases for each of the storm events. Water quality features are designed to a more frequently recurring storm, in accordance with NYSDEC regulations. Stormwater runoff generated by events with up to 1.1 inches of rainfall has been determined to account for 90% of the storm events which occur. The water quality features will provide treatment for all of the events.

Rainfall events with up to 1.1 inches of rain over a 24 hour duration have been statistically determined to account for 90% of the rainfall events in this region. The type III storm is related to the historical distribution of rainfall over the 24 hour duration.

The project's impacts on issues related to stormwater are fully addressed by its adherence to all applicable governmental stormwater management regulations.

5. SEWAGE TREATMENT PLANT (STP) AND SANITARY SEWAGE SYSTEM

Operational Malfunctions at the STP

- *How will STP handle operational malfunctions to prevent the discharge of raw sewage or partially treated effluent into John Woods Brook?*
- *“The STP must be provided with duplication of critical units and an emergency power system to avoid adverse impacts from equipment malfunctions, operator error, or any other cause.”*
- *“The STP must be designed in such a manner that, if there is any type of failure or malfunction, which would allow untreated or partially treated raw sewage to be discharged from the plant, it will be collected and channeled to a detention area on site for emergency storage. Under no circumstances shall untreated or partially treated sewage be allowed to flow off the site.”*
- *What are the impacts on ecosystem of John Woods Brook if an emergency situation develops in which STP discharge is untreated or has to be chlorinated?*

Comments: Ph-8; B-2, 3, 4; L-31

Each piece of mechanical equipment is provided in duplicate, with automatic switchover in the event of malfunction. The wastewater treatment plant also employs an auto-dialer system to contact up to three persons in the event of any potential non-compliance situation for immediate action. It also employs a Programmable Logic Controller with remote monitoring capabilities so that the system and all of its operational components can be monitored for redundant compliance protection.

Emergency electric power generation equipment will be provided in the event of power failure as this is a requirement of regulatory authorities having jurisdiction over such facilities.

Automated alarm systems are provided to inform the operator(s) of failures of key equipment so that repairs may be affected immediately.

Full flow equalization capacity is provided which will enable storage of flow during periods when it is required to effect repairs.

One of the conditions of all permits requires that no discharge of untreated or partially treated effluent is allowed. The system is designed to prevent such occurrences. Discharge of untreated sewage to a detention pond would not be permitted.

The treatment system will be designed to meet the requirements of the regulatory authorities having jurisdiction over such facilities and as such will either utilize a sand filtration system in conjunction with redundant ultraviolet disinfection system or chlorination disinfection system.

Discharge of untreated sewage to John Woods Brook would not be permitted in any event. In the event of total failure, the permittee would be required to haul influent to another treatment facility. With the utilization of a suitable disinfection system and the associated notification and monitoring system provided for rapid response of operational personnel, a situation where untreated effluent would be discharged into the John Woods Brook is not anticipated. Therefore there would not be a situation that would render a negative effect on the ecosystem.

STP Effluent

- *Having the STP effluent flow into John Woods Brook, which often runs dry, will cause erosion of the Brook.*
- *The STP effluent will pollute the groundwater and contaminate area wells.*
- *SDEIS has not addressed impact on flora and fauna of: the chlorine content in the effluent of the STP; the substantial temperature differential in the winter months between STP effluent and temperature of John Woods Brook water.*
- *Is the project allowed to discharge treated sewage effluent into a stream bed that has no natural flow?*
- *SDEIS does not address the temperature of STP effluent that will be discharged to John Woods Brook.*

- *What will happen during periods when stream is frozen? Will the culvert carrying the Brook under Wilson Road freeze up and cause the STP effluent to flood the road? Will the effluent become large sheet flows? Will it freeze in the box culvert under Route 97 and flood Route 97? Will the temperature differences between the STP effluent and the air cause fogging which will impact visibility where it crosses Wilson Road? Will the temperature of the STP effluent impact ice formation and ice breakup in the Delaware River downstream from John Woods Brook?*

Comments: PH-6, 8; A-2; B-6; F-38; L-25; L-30(D), 32

Erosion of streambeds occurs naturally as a function of flow, but erosion during low flow periods is not a problem, as flow from the treatment facility would be less than the pre-development flow during periods of light or moderate rainfall. During periods of heavy rainfall, the STP effluent would be a de-minimis addition to the ambient flow (see responses to comments regarding stormwater management systems). During non-rainfall periods, the STP effluent would add to stream flow measurably, and, as erosion is a function of flow, would contribute to streambed erosion. However, as previously noted, greatest erosion occurs during flood conditions.

Since discharge would be to the brook, it would not go to neighboring wells. By definition, streams are discharges from groundwater, not entrances to it.

At this time it cannot be determined whether the use of chlorine as a disinfectant would be required by the STP permit, or, if it is, whether dechlorination would be required as well. It is also possible that Ultraviolet radiation (UV) may be stipulated. As a result it is difficult to assess the effect of chlorine on the flora and fauna. If UV or dechlorination were required, there would be no effect. If chlorination, but no dechlorination were required, then the discharge of chlorine would be typical of that contained in drinking water. The effluent quality controls established by NYSDEC will mitigate potential impacts to flora and fauna associated with John Woods Brook and the Delaware River.

Temperature of discharge would approximate the temperature of groundwater, which changes little seasonally.

Typically, regulatory agencies will not permit discharges to dry ditches; however a stream, even an intermittent stream is not a dry ditch, and is therefore often employed for discharges. The regulatory agencies determine if such streams are suitable discharge sites based upon environmental factors.

Running water does not freeze, and therefore plugging of the streambed or culvert by effluent would not produce the scenario envisioned. The culvert under the road would not be expected to freeze, as it would be expected to be below frost line. As STP effluent is at groundwater temperature, and groundwater temperature is the normal temperature of the stream, fogging would be neither less nor more than that present now. The concept that the discharge of the STP could effect ice formation or breakup in the Delaware River is negligible, as can be seen by the ratio of the flows.

RBC (rotating biological contactor) Type of STP

- *Is the RBC Sewage Treatment Plant still considered the best available technology? What other systems are available and what are their benefits/ disadvantages?*
- *Requests detailed explanation and calculations to support SDEIS statement at page IV-66 that, “The possible use of alternative treatment approaches such as spray irrigation and wetlands treatment systems was considered and rejected because they are only applicable seasonally and would not accommodate the project need in winter.”*
- *Deerpark Village project should use in-ground septic sewage treatment. “A properly designed, used and maintained septic, generates no more pollutants into the environment for each unit it serves than the STP that is being proposed for this project does.”*
- *The SDEIS should include “a narrative identifying the environmental benefits of using education, along with on-site treated septic effluent disposal, as a means to prevent the original contamination of sewage with non-biodegradable toxins.”*

Comments: F-42; L-26,28,29,30(B),30(C),76

In consideration of various comments, the applicant has decided that, in place of the RBC plant previously proposed, Deerpark Village will use an Alternating Aerobic/Anaerobic Fixed Film Media Trickle Filter System STP; it plans to use the Aqueonics’ patented Alternating Aerobic/Anaerobic Fixed Film Media Trickle Filter System (hereafter referred

to as the “Aqueonics System”) or an equivalent. This system is more fully described in FEIS Appendix 5 and FEIS Section I (in the sub-section titled “Sewage Treatment Plant”). The material in the referenced FEIS Section I and Appendix 5 is responsive to comments regarding the previously proposed RBC system.

The alternative sewage treatment systems of Spray Irrigation, and Wetlands treatment systems fail, not because of lack of calculations, but because of climate. Spray irrigation is an alternative for a disposal process, not a treatment process. Treatment must be provided prior to land application to prevent groundwater contamination. When the ground is frozen, however, this disposal method fails, and is therefore unacceptable. The wetlands treatment processes have been found to be unsatisfactory in this climate, as they require action by plants which die or are inactive in the winter. Wetlands treatment systems are also subject to toxic shocks and blights which inhibit their performance.

The commentor’s statement that “a properly designed septic system generates no more pollutants into the environment for each unit it serves than the STP that is being proposed for this project does” is debatable. Individual septic systems often do not address ecological problems generated by large quantities of septic systems. Septic systems may discharge large quantities of Biological Oxygen Demand (BOD), Nitrates (NO₃-N), Ammonia, Phosphorus and bacteria. STP’s are designed to reduce all of these to appropriate discharge levels. Permit requirements typically reduce BOD to 5%, NO₃-N and Ammonia to <25%, Phosphorus to <5%, and bacteria to <.001% of septic discharges. Septic discharges can vary broadly in terms of contaminant release. With STP discharges, the level of treatment is tailored to environmental requirements. The United States Environmental Protection Agency (USEPA) has cited septic tanks as the second most frequent source of ground water contamination^{*}, as reported by States, Tribes and Territories.

Education regarding sewage treatment is an important element for all citizens, regardless of the type of treatment employed. Federal and State laws forbid the discharge of toxic and

^{*} National Water Quality Inventory 2000 Report, August 2002, USEPA, Chapter 6, pages 50, 52.
[<http://www.epa.gov/305b/select> 2000 Report after accessing site]

dangerous materials by any person. Residents who discharge such materials are subject to penalties and prosecution if they are identified anywhere in New York. All buyers will be supplied with informational documents regarding disposal of toxic and dangerous materials.

STP Odors and Noise

- *The operation of the STP will result in unpleasant odors that are likely to be experienced by area residents. SDEIS notes that various STPs have been approved by NYSDEC throughout the State. Asks for a list of such operating STPs which the Planning Board could visit and evaluate for themselves.*
- *Additional information is needed regarding mitigation of noise and odor from the STP.*

Comments: PH-8; B-5, 6; F-41

The sub-section of FEIS Section I titled “Sewage Treatment Plant” includes a discussion of STP odors and noise that is responsive to these comments.

Other Comments Pertaining to the STP and Sanitary Sewer System

- *“All sewage pumping stations on the site should be provided with duplex submersible grinder sewage pumps and emergency power facilities.”*
- *A monitoring well should be included as part of the STP project.*

Comments: B-4; F-40

All sewage pumping stations will be designed to municipal standards and in accordance with NYSDEC regulations. These design parameters will require duplex facilities, standby power, and the ability to pass 3 inch solids.

The use of a monitoring well in connection with the construction and operation of the STP proposed for this project has never been required in any of the numerous jurisdictions in which Aqueonics has constructed such a plant. Overflow or improper discharge from the treatment facility would be a violation of the permit, and is therefore unacceptable. On the other hand, domestic sewage is not toxic waste, and remediation would not be required if a spill of treated effluent were to occur. (Also, see response to comments Regarding the

possibility of “Operational Malfunction at the STP”.) Therefore, there would seem to be little purpose in the installation of such a well. However, if the regulatory agencies (NYSDEC or DRBC) were to require such a monitoring well, it would be included as part of the STP.

- *Details regarding the STP should be provided to the Planning Board and Town Engineers prior to their approval of a site plan for this project. Their review should assure that it conforms to all requirements regarding required separation from wetland and water wells.*

Comments: E-4; F-39; M₄-7

This procedure will be followed.

- *At what point will the number of occupied units be sufficient for the STP to be supported by user fees and not require subsidies from the developer?*

Comment: L-27

This is a legal issue which will be addressed in either the condominium prospectus or the homeowner association contract either or both of which require the approval of the NY State Attorney General.

- *Is applicant aware of Delaware River Basin Commission requirements and regulations regarding waste water discharge to Special Protection Waters of the Delaware River.*

Comments: L-26, 51

The project will probably require certain permits from the Delaware River Basin Commission (DRBC) prior to the start of construction. The Applicant has been advised by DRBC that a Project Approval Application Form as well as the following documents will have to be submitted:

- National Treatment Alternatives Analysis
- Measurable Change Analysis for Water Quality Impacts
- Standby Power, Remote Alarm Systems and Emergency Management Plans
- Non-Point Source Pollution Control Plan

The SDEIS indicates the STP capacity will be 375,000 GPD, but the total load will be slightly larger at 375,240 GPD.

Comment: F-37

As noted in the SDEIS, the estimated sewage generated by each housing unit is believed to be overstated because the number of persons per household in Deerpark Village is expected to be lower than in the typical housing unit used as the basis for the projection. The overall project will be built in 10 stages. After the first or second stages have been completed, the site plan applications for subsequent stages will use actual sewage generation rates in the preceding stages to project future sewage generation, and it is anticipated that those rates will indicate total project sewage generation of slightly less than 375,000 GPD. As noted in FEIS Section I.H (“Sewage Treatment Plant”), the STP will be developed in stages. If the data based on actual sewage generation rates indicates total generation in excess of 375,000 GPD, the STP capacity will be increased to accommodate that load.

It is noted that a comparison of sanitary sewage generation by the 1,518 unit project and the 900 unit alternative described in the FEIS indicates that the 900 unit alternative would generate 222,000 gpd as compared with 370,200 gpd for the 1,518 unit project. Thus, the alternative would result in an approximately 40% reduction of sanitary sewage flow.

The sewage treatment plant system will be designed as a modular system to add treatment as required for increased flows due to infiltration and inflow, etc.

6. TRAFFIC

Comments regarding nine specific traffic subject areas, as well as the sources of these comments, are noted immediately below. Detailed responses to these comments are presented in FEIS Section I.C, “Supplementary Traffic Analyses” (page I-12).

(1) Traffic Count Age and Seasonality

Comments noted that the traffic counts were made in April of 2004 and, therefore, were too old to continue to be used as the “existing” traffic.

Other comments stated that counts taken in April under-counted the higher summer seasonal volumes experienced along the Route 97 Scenic River Corridor.

Comments: F-25,58,62,70; J-3; L-14; M₁-6; M₂-2

(2) Project Traffic Generation is Underestimated

Comments noted that the use of more recent trip generation data for active adult age-restricted communities would result in 30% to 40% more project generated traffic.

Comments: PH-5; F-24,30,55,59,60,63, 64; J-3; L-15; M₁-6; M₂-2

(3) Stopping Distance Safety

Comments questioned the adequacy or safety of stopping distances at three intersections: Route 42/Wilson Road, Route 97/Wilson Road, and Route 42/Route 97.

*Comments: A-1; E-5; F-26,27,65,66,70; J-3; K-3; L-18, 21;
M₁-6; M₂-2; M₄-6*

(4) Pass-By Factor (Diverted Trips)

Comments noted that with regard to the retail component of the proposed development, the traffic analysis should use a greater percentage of “diverted” trips than the 25% noted in the SDEIS. In other studies (see townofnewburgh.org), the same consultant who prepared the Deerpark SDEIS argues that 25% is too low.

Comments: M₁-6, M₂-2

(5) Traffic Accidents

Comments asked that the project assess the traffic safety based on FHWA algorithms for accident prediction, and that intersection safety analyses be provided for the intersections of Route 42/Route 97 and Wilson Road/Route 42.

Comments: F-67, 70; L-13; M₁-6

(6) Actual Road Peak Hour

Comments questioned whether the peak hours specified in the DEIS were the actual roadway peak hours.

Other comment noted that retirement communities generate a greater proportion of their trips during the non-rush hour periods.

Comments: F-58,62,70; M₁-6; M₂-2

(7) Van Shuttle Service

A comment indicates that the SDEIS fails to note that there is no public transportation available for trips between the site and the Port Jervis train station, or for that matter between the site and local shopping areas or community services.

Comments: PH-9; F-69,70

(8) Separate Count of Truck Traffic

A comment noted that the analysis of traffic is incomplete because the traffic counts, on which the analyses were based, “failed to account for, separately, trucks and heavy vehicles”.

Comment: M₁-6

(9) Project Traffic at Route 97 Intersection with Wilson Road

A commentor asked why traffic to and from the site was routed entirely through the intersection of Wilson Road with Route 42 and not even partially through the intersection of Wilson Road and Route 97.

Comment: F-57

As noted above, responses to comments listed under items (1) through (9) are presented in FEIS Section I.C, “Supplementary Traffic Analyses”.

In addition, it should be noted that traffic generation by the 1,518 unit project described in the SDEIS would be reduced by the alternative 900 unit project described in Section I.J of this FEIS.

The following chart compares the estimated AM and PM peak hour traffic generation figures for the original 1,518 unit project and the 900 unit alternative. The alternative would result

in a 30% reduction in AM peak hour traffic generation and a 19% reduction in the PM peak hour.

	SDEIS (Number of Vehicles)	Alternative (Number of Vehicles / % of Original)
AM	393	274 / 70%
PM	745	603 / 81%

Additional General Traffic Comments

- *Wilson Road will need to be improved or widened to accommodate project traffic.*

Comments: B-7; F-29,56,70; G-3; I-4; J-1,3; K-3; L-13

The extensive traffic analyses conducted to date for traffic to be generated by Deerpark Village and other non-project traffic for the Build Year (year of complete development) indicate that Wilson Road at its present width has sufficient capacity to accommodate projected traffic.

The Applicant has agreed to perform follow-up traffic surveys prior to each stage of development for which site plan approval will be required. Should those surveys, and a subsequent Town Board determination, find that the project will produce impacts that affect traffic capacity or safety, the developer will pay for the proportion of costs necessary to address impacts which are equal to the ratio of Deerpark Village traffic generation to total projected traffic generation.

With regard to “wear and tear” impacts on Wilson Road which may require repaving within the present right-of-way, the Applicant has agreed that, should the Board accept the 1,518 unit proposed plan, a payment by the Applicant of a \$1,000 contribution to a Highway Improvement Fund to be established by the Town Board will be made each time that a Certificate of Occupancy will be approved for a new dwelling unit by the Town Building Inspector.

- *If it is necessary to widen or improve Wilson Road, eminent domain should not be used to acquire additional right-of-way.*

Comments: PH-1; F-29; G-3; H-4; I-4

In the event that the Town determines that widening would require acquisition of any privately owned land, the Town would work with the affected property owners to assist in the ROW acquisition that may be necessary in order to avoid any use of eminent domain.

- *A commentor suggests that SDEIS data and analysis should be presented in “summary table and easy to review formats”. As an example, suggests that traffic impact at the Wilson Road/Route 42 intersection be presented so that existing, no build and build traffic volumes for specific movements are listed, with each volume compared to the existing by noting the percentage increase between existing and no build and between existing and build. Also, suggested that the table show the volume of heavy vehicles and the queue length of critical approaches together with the percentage increase from existing to no build and build. A sample of the suggested table is included in the comment.*

Comments: L-22;M₂-11

FEIS Appendix 1, as described below, includes data for the Existing, No Build and Build conditions; the data is presented for each movement and for the overall intersection and includes traffic volumes, levels of service and queue lengths. Summary tables of the Levels of Service for the Existing, No Build and Build conditions can be found at pages 1 to 5 of Appendix 1; Traffic Diagrams at pages 6 to 22; and, the detailed worksheets determining Level of Services for each intersection under varying conditions at pages 23 to 79.

- *The traffic analysis presented in the SDEIS should have reflected the use of Wilson Road as a by-pass route when Route 97 is temporarily closed.*

Comments: PH-3; D-2; L-13

This is an infrequent operational issue which is ordinarily addressed by police and public works personnel.

- *Is the proposed parking adequate? How will parking be assigned? What will happen if there are not enough parking spaces?*

Comment: L-15

Parking spaces for each stage will meet Town zoning requirements and their assignment will be detailed in each site plan submission for review by the Planning Board.

- *A separate traffic study by someone other than the applicant should be completed to assure the validity of the results.*

Comments: D-2; L-23

The Town's consultants have reviewed the traffic study and their comments are included in Appendix 13 (pages 17 to 38), and the responses to those comments are included in this FEIS (see Section II.B.). Future traffic studies for each stage to be reviewed by the Town Engineer.

- *The Project requires the preparation of a comprehensive traffic analysis.*

Comment: F-61

A detailed comprehensive traffic analysis is found in Section IV.G of the SDEIS (pages IV-22 to 43) and Appendix A ("Intersection Capacity Analysis Spreadsheets") of the SDEIS. Supplementary Traffic Analyses are found in Section I.C (page I-13) and Appendix 1 of this FEIS.

- *The SDEIS traffic generation figures do not reflect traffic generated by garbage trucks moving project generated refuse to waste disposal sites, truck delivery to residents, etc.*

Comments: F-45; L-20

The traffic generation projection takes into account all sources of traffic generated by the project.

- *Regarding additional traffic studies as the project is built, a commentor notes that the SDEIS indicates additional traffic studies will be undertaken after completion of the first 20-25% of the 1,518 units. The commentor suggests that these studies should be conducted after completion of the first 150 units*
- *Another comment indicated that instead of re-evaluating traffic impacts as each 20-25% of the units are constructed (and 85% of them are occupied), as suggested in the SDEIS, the Town should “demand that all required upgrades to roads and services be performed PRIOR to any development occurring..*

Comments: F-68,70; M₁-6

The mitigation summary in this FEIS now provides that, at the time of submittal of a site plan application for each stage of development, the application will be accompanied by a traffic study which will examine existing conditions at study intersections and the impact of traffic to be added by that stage of development. Should the study determine that any improvements are necessary in order to mitigate the impacts of that stage of development, the developer will be responsible for installing those improvements as part of the construction of that development stage.

- *Regarding Old Cochecton Turnpike, a commentor stated that the project should improve Old Cochecton Turnpike and use it as its main access/egress.*

Comment: L-17

There does not appear to be any reason that such a main access/egress connection would be preferable, in terms of traffic impacts, to the connections which are proposed.

It is proposed to improve Old Cochecton Turnpike to a standard which would enable it to serve as an emergency access road.

- *Regarding construction traffic, comments questioned the validity of SDEIS construction traffic data and asked for documentation based on observation of similar size projects.*
- *Another comment noted that the impacts of construction truck traffic were “almost completely ignored”; increased heavy truck traffic was not at all projected in the build or no build scenarios.*

- *Yet another comment stated, “The effect of heavy vehicles, particularly related to the proposed 10 year construction period, were not factored into the capacity analyses. There is no mention of any kind of a Traffic Management Program.”*

Comments: PH-7; D-2; L-18; M₁-6; M₂-2

The extensive traffic analyses included in the SDEIS and the Supplementary Traffic Analyses in Section I.C of the FEIS examine peak hour, i.e., worst case conditions, for the build out of the total project. Thus, the traffic generation assumed in these analyses far exceeds the equivalent to construction traffic generation impacts, i.e., to examine the latter would merely be an examination of a lower level of traffic than that assumed in these analyses.

A Traffic Management Program, when required because of anticipated unusual conditions, is normally provided as part of a site plan application for each stage of development. At that time the type of construction equipment to be used, number of construction employees at peak periods, peak period construction vehicles...for that stage can be better determined.

If required by the Planning Board, the applicant will agree to submit a Traffic Management Program for each stage of development for review by the Town Engineer and Town Police Department.

Construction traffic will be utilizing designated roads and will have stabilized entrances to avoid mud and dust. Trucks and equipment will not idle for more than 5 minutes at a time.

- *Regarding Summary Tables of Traffic Analyses, a commentator suggests that SDEIS data and analyses should be presented in “summary table and easy to review formats”. As an example, suggests that traffic impact at the Wilson Road/Route 42 intersection be presented so that existing, no build and build traffic volumes for specific movements are listed, with each volume compared to the existing by noting the percentage increase between existing and no build and between existing and build. Also, suggested that the table show the volume of heavy vehicles and the queue length of critical approaches together with the percentage increase from existing to no build and build. A sample of the suggested table is included in the comment.*

Comments: L-22; M₂-11;

FEIS Appendix 1, at pages 1 to 5, includes summary tables of the data for the Existing, No Build and Build conditions; the data is presented for each movement and for the overall intersection and includes traffic volumes, levels of service and queue lengths.

- *The increasing incidence and severity of physical and functional impairments experienced by older persons makes the addition of a large number of senior citizen housing units on Wilson Road a serious safety issue because of its existing challenging conditions.*

Comment: I-5

The State Department of Motor Vehicles requires eye examinations as a condition for obtaining a license. Those deemed to have deficient vision are thus prohibited from driving.

There are numerous similar retirement communities throughout the US and this is not known to be a significant problem. In fact, more probably, a concentration of senior citizens provides a greater opportunity for mutual support and discussions and advice on defensive driving and ophthalmological treatment than for seniors living in scattered locations. To prohibit developments of this type on the grounds cited in this comment would constitute age discrimination.

If there is sufficient demand, there will be a shuttle van service for those seniors who do not wish to drive or can no longer drive. (See FEIS Sections I.C and I.F for description of the shuttle van mitigation proposed.)

7. VEGETATION, WILDLIFE, WETLANDS AND PETS

Comments regarding these subjects, as well as their sources, have been grouped into the seven subject areas noted below. Detailed responses to these comments are presented in FEIS Section I.D “Supplementary Ecology Report”.

(1) New Field Survey and Updated Letters from NYSDEC and US Fish and Wildlife Service

- *The NYSDEC and US Fish and Wildlife Service letters included in SDEIS should be updated.*
- *Comments suggested additional surveys of flora and fauna should be completed and they identified specific species to be evaluated. Comments also suggested that the new survey determine whether the site contains vernal pools.*
- *The flora and fauna included in the report attached to the NYSDEC letter should be identified and discussed in relation to possible project impacts.*

Comments: PH-7; D-4; E-7; F-6 ,7, 9; L-35, 62; M₁-4;M₄-5

(2) Federally Listed Endangered and Threatened Species

A compilation of federally listed endangered and threatened species should be provided.

Comments: F-7; M₁-4

(3) Bald Eagle

Concerned that project will have adverse impact on bald eagles.

Comments: F-8; I-6

(4) Impact of STP Effluent and Stormwater Runoff on Flora and Fauna

- *The project’s STP effluent and stormwater runoff have the potential to adversely impact project wetlands, flora and fauna, downstream wetlands, John Wood Brook and the Delaware River.*
- *Questions SDEIS statement that only 0.23 acres of existing wetlands will be impacted by project.*

- *Have off-site wetlands been delineated?*

Comments: E-6; G-2; L-30(E), 41, 42, 49; M₁-2; M₄-4

(5) Area Between Wetlands and Drainage Areas II and III.

- *The area should be evaluated to determine if it serves as a wildlife and plant habitat connection of these two wetlands.*
- *A buffer area greater than the 100 foot non-disturbance "adjacent area" should be provided for their protection.*

Comments: L-35

(6) Impact on Bears

There is an existing problem with bears finding their way onto residential properties. If the project site is developed, this problem will worsen.

Comment: PH-9

(7) Household Pets

The concentration of 1,518 units on this site means the project will result in a high concentration of house pets. Assuming pets in 60% of the households, the project could result in the addition of 455 dogs and 455 cats. Among the questions raised are the following:

- *Will there be dog runs?*
- *How will dog waste be handled to prevent it from adding to the problem of non-point source stormwater runoff pollution?*
- *Will there be dog leashing requirements to prevent dogs from running after deer or bear?*
- *If many residents exercise their dogs at Mongaup Wildlife Area, what impact will this have on that area?*
- *Will the project's creation of new edge habitat and its introduction of a large number of pet cats result in a magnified impact of cats on the wildlife birds?*
- *Will there be predation of snakes by domestic cats?*

- *What is the range of domestic cats that are allowed to roam?*

Comments: L-63

As noted above, responses to the preceding comments on vegetation, wildlife, wetlands and pets are presented in FEIS Section I.D (page I-42) “Supplementary Ecology Report”.

8. VISUAL

The SDEIS “should evaluate the development’s visual impact with respects to including ridgeline impact from across the Monquap Valley from Route 31 as well as across the Delaware River in Millrift, PA.”

Comments: F-3

A report titled “Visual Impact Analysis Deerpark Village” dated May 8, 2008 was prepared by Shuster Associates. A copy of the report is included in Appendix 8 of this FEIS. The report evaluates the potential visual impacts of the project from across the Mongaup Valley as well as from across the Delaware River. The report’s findings and conclusions are:

- Based on topography, the 3 mile viewshed map (see Appendix 8, page 4) indicates that for the most part, the Deerpark Village site will not be visible from either Route 31 or the Delaware River.
 - The site is not visible from 87% of the Delaware River’s 6.5 mile run through the 3 mile viewshed area. It may be visible from 13% of the 6.5 mile length, which percentage may be reduced to almost zero when the intervening forested areas are considered.
 - The site is not visible from 75% of the 4 mile length of Route 31 within the 3 mile viewshed area. It may be visible from 25% of the 4 mile length, which percentage may be reduced to almost zero when the intervening forested areas are considered.

- The line of sight profiles (see Appendix 8, page 5) further illustrate that the view from both Route 31, above the Mongaup River, and the Delaware River will be obscured by topography.
- Lighting of the site will undoubtedly produce some minor illumination that will be detectable from off-site locations. Outdoor site lighting will be limited to the minimum necessary to meet recognized safety standards. However, no direct view of light sources will be visible from the sensitive areas in question and light sources will be shielded to reduce illumination to the maximum extent possible.

The Appendix 8 Visual Impact Analyses shows the proposed Deerpark Village project will not have a significant adverse impact on views from across the Mongaup Valley and from the Delaware River.

9. COMMUNITY SERVICES

A number of comments raised the following concerns about the project's impact on community service:

- *If Wilson Road has a blockage, how will emergency vehicles access the project?*
- *How will hospital, mail, fire, police and ambulance service to other Town residents be impacted by the addition of the project's homes?*

Comments: PH-5, 9, 10; F-47,48,51; G-5

In the event of a Wilson Road blockage between the project and Route 42, emergency vehicles could access the project either from Route 97 (via Wilson Road) or from the project's emergency access to Cochecton Turnpike. If the Wilson Road blockage were to be between Route 97 and the project, emergency vehicles would have project access from Route 42 (via Wilson Road) or from the project's access to Cochecton Turnpike.

Bon Secours Hospital, the primary hospital resource for this area, has indicated their ability to meet the local hospital needs of Deerpark Village residents. See Appendix 4 for copy of their letter.

The Port Jervis Volunteer Ambulance Corp., Inc. has indicated they “will have the ability to provide emergency services to the residents of the proposed Deerpark Village Development. (see FEIS Appendix 9).

Fire, police EMT and mail services are governmentally provided and would be expected to respond to the additional demands generated by project residents without diminishing their service to other Town residents. The cost of the additional fire, police and EMT services would be offset by the project’s payment of Town and Fire District property taxes.

As additional mitigation, the project will have its own 24-hour internal security personnel at such time as a sufficient number of units have been developed and such personnel became economically feasible. Further, at least one of the security personnel will be EMT trained and certified.

10. CULTURAL RESOURCES

Several comments suggested that a study of the site’s cultural resources should be completed.

Comments: L-61; M₁-7, 9; M₂-2

A study of the site’s cultural resources was completed by Hartgen Archeological Associates in 2008. A copy of their report (dated June 2008) is included in this FEIS as Appendix 2.

11. ENERGY CONSUMPTION AND CONSERVATION

A comment requested that an up to date letter from Orange and Rockland Utilities be obtained regarding their ability to meet the electric power demands of the Deerpark Village project.

Comment: B-8; F- 46

A copy of such a letter is included in this FEIS as Appendix 10.

Another comment asked:

- *How will the project be designed to meet conservation goals in the consumption of energy resources?*
- *How will the project mitigate its impact on fuel consumption due to the need for residents to travel several miles to reach existing service and retail sources?*
- *Has the applicant investigated the feasibility of connecting to the nearest natural gas line?*

Comment: L – 24

The project will conform to all applicable government building codes relating to the conservation of energy. Detailed plans relating to these measures will be included in the Site Plans Application drawings submitted for Town review and approval as each phase of this project is implemented.

The project will mitigate its impact on fuel consumption by:

- (a) Including the development of 50,000 square feet of commercial floor area to make access to retail and service facilities easier for its residents and thus to reduce off-site vehicular travel.
- (b) Including the possible provision of a van shuttle service as described in FEIS Section I.C, Supplementary Traffic Analyses” (see “Van Shuttle Service”).

There are no known natural gas lines sufficiently close to the Deerpark Village project to suggest the possible feasibility of connecting the project to such a fuel/energy source.

12. PROJECT APPLICANT

What safeguards will be employed to assure the applicant can complete the project in a workmanlike manner?

Could the applicant, after starting project, file for bankruptcy and the partially finished project become a slum, or housing set aside for welfare recipients?

Comment: D-5; L-27

The Town Planning Board, as a condition of site plan or subdivision approval, normally requires the applicant to provide performance bonds which guarantee the completion of necessary infrastructure for the stage which is the subject of approval.

The bonds are to be in accordance with the Town Code. In addition, for each phase a restoration bond for grading and seeding to be posted to restore the property to original condition if the phase started and stops.

13. SOILS, TOPOGRAPHY AND SLOPES

Comments were raised about the possibility that certain of the soil types may result in construction difficulties; that certain steep slopes maybe disturbed; and that the existence of certain steep slopes may inhibit the size of the development.

Comments: F – 1, 4, 5

Construction stage impacts will be addressed through the preparation of a Sediment and Erosion Control Plan for each stage of development that will be reviewed by the Planning Board as part of site or subdivision plan review. The Sediment and Erosion Control Plan will also be subject to the approval of the New York State Department of Environmental Conservation. SDEIS pages V-4 to V-8, provide information as to the types of mitigation that will be utilized to address potential soil erosion, sedimentation and other construction disturbance impacts. These include barriers, plantings, protection of soil, dust control, limited disturbance, limited grading, seeding, and mulch.

Very small portions of the site, approximately 8%, contain steep slopes, i.e. those over 15%. As can be seen by comparing the Land Use Plan Map (see FEIS Section I.E at page I-50) and the Slope Analysis Map (SDEIS Figure III-3 following SDEIS page III-12)), there will be very little development within the steep slope areas. Further, detailed site planning for each stage, will review all disturbance areas, and make such adjustments as may be necessary to further minimize steep slope disturbance.

14. AIR QUALITY

Air Quality analysis was not done for Route 42/Route 97 intersection.

Comment: F – 10

Carbon monoxide from site-generated traffic is the primary source of potential impacts at off-site locations because emissions during peak traffic conditions can create locally high concentrations of CO at congested intersections. CO air quality guidelines and protocols described below are based on the NYSDOT Environmental Procedures Manual (EPM), Chapter 1.1 (accessed online May 2008 <https://www.nysdot.gov/portal/page/portal/divisions/engineering/environmental-analysis/manuals-and-guidance/epm/repository/epmair01.pdf>).

As described in the SDEIS traffic report (see SDEIS page IV-30), six categories for level of service (LOS) define the traffic operations at an intersection or approach. The traffic LOS is typically calculated for each intersection approach, as well as the intersection as a whole. For signalized intersections, the overall LOS is a key indication of intersection congestion. For unsignalized intersections, however, the LOSs on minor approaches are of primary concern because the major approaches are free-flow links, and their traffic does not stop at the unsignalized intersection. The minor approach with the poorest LOS is termed the critical movement or critical approach.

The NYSDOT Environmental Procedures Manual) provides screening criteria for determining whether a microscale CO analysis should be carried out for an intersection. The first criterion is a level of service (LOS) screening. Intersections with a projected LOS of A, B, or C under Build Conditions are generally excluded from microscale CO analysis. Intersections with an overall LOS of D or worse under Build Conditions would need to be further evaluated using NYSDOT's capture screening criteria.

The supplementary traffic analysis (in FEIS Section I.C at page I-13) has demonstrated that for all the build years analyzed, the intersection of Route 42 and Route 97, which is proposed to have a traffic signal at full build-out, would operate at LOS B. Thus, no air quality analysis is required.

SDEIS statement indicating no mitigation is required or proposed, because no impacts have been identified, is inadequate.

Comment: L – 54

Potential air quality impacts during operation of the project are discussed in responses to comment F-10 (above) and comments L-56, L-57, L-58, and L-59 (below). Since there are no impacts during project operation, no mitigation is required.

Potential air quality impacts during construction are discussed in responses to comments L-55 and L-59 (below). Best management practices (BMPs) are described in L-55. Use of these BMPs will ensure that there are no adverse air quality impacts that require further mitigation.

Requests discussion of construction impacts on air quality due to clearing, grading, blasting, operation of construction equipment and truck dust and particulate generation.

Comment: L-55

Construction period impacts and mitigation measures are reviewed in the SDEIS (see pages V-4 through V-8).

Air quality impacts associated with short-term construction activities may include fugitive dust from movement of soil, exhaust and particulate emissions from diesel-fueled construction equipment. Fugitive dust impacts from excavation and storage of materials are temporary in nature and will be minimized by using best management practices such as wetting the soil surfaces, covering trucks and stored materials with a tarp to reduce windborne dust, and proper maintenance of equipment. Typical erosion control measures include silt fences, wheel wash down areas, temporary seeding, outlet protection, dust control, temporary sediment traps and outlet control devices, covering of stockpile materials and hay bales. Exposed areas will be stabilized as soon as possible after disturbance to minimize dust. Soils will be stabilized with tackifiers (glues that tie mulch and soil together), geotechnical fabrics, natural ground coverings, and the establishment of seed beds. Roadway and haul roads will be stabilized with tackifiers, geotechnical fabrics and stone ballast as required to minimize dust. Tracking pads will be established where trucking vehicles move

from construction areas to established roadways to prevent dirt from being tracked on to pavement. Wash stations will be installed at the tracking pads and their utilization will be required prior to leaving a disturbed area.

Blasting of rock during site construction can generate intermittent air-borne particulates on a short-term basis. Because blasting would be a short-duration activity, dispersal of dust to neighboring properties is the primary concern in terms of air quality. However, dispersal of dust after blasting will be mitigated by wetting the area prior to blasting and/or blasting on days with low wind speeds (under 5 mph).

Rock processing operations that have the potential to generate dust, such as rock crushing, will be sprayed with water to control dust dispersal. Stockpiles will be covered and/or stabilized with an established seed bed to prevent windblown soil and dust from leaving the piles. Roadways will be washed regularly to prevent dust from being generated by vehicle traffic. Best management practices will be included in the specifications of the construction contract.

Will the units have fireplaces? How many and what type of fireplaces? How will they impact the air quality?

Comment: L-56

It is not known at this time whether the units will or will not have fireplaces. If there are fireplaces provided in any of the units they will not be wood burning fireplaces (which do have the potential to emit large amounts of particulate pollution). If fireplaces are provided in any of the units, they will be propane, electric, or gel fuel fireplaces, which will not emit air pollutants in quantities that will cause any air pollution problems.

What type of heating units will be provided for each residential unit, and how will they impact the air quality?

Comment: L-57

It is anticipated that the units would be heated with electrical heat, propane or natural gas. There would be either no onsite air pollutant emissions (electric), or very low emissions (propane or natural gas) that would not cause any ambient air quality standard violations and would be so low as to not have to be modeled.

How will waste gases from the STP impact air quality? Will the waste gases be combusted?

Comment: L – 58

The proposed Sewage Treatment Plant (STP) is the Aqueonics' (or equivalent) Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter Treatment System which is described in FEIS Appendix 5. This STP is entirely enclosed for the purposes of containing noise and odors, as well as ensuring uniformity of operation and protection from the environment. Fresh air is drawn in from the outdoors and is circulated through all areas of the treatment processes. It is then filtered and chemically scrubbed to neutralize odors before it is discharged to the outside environment. External to the STP, odors are designed to be unnoticeable, and noise is the equivalent to the hum at a private swimming pool. Aqueonics has built STPs in New York State, and Sussex County, NJ which are available for tour by interested parties. See responses to comments regarding STP and sanitary sewer system for additional discussion of this subject. Air quality will be checked as required by the SPDES (State) permit.

How will air quality be impacted by the generation of vehicular traffic during construction and after completion of the project?

Comment: L- 59

Construction traffic volumes are far less than traffic volumes following project completion. Following NYSDOT screening procedures (see the response to comment F-10) it is clear that there will be no adverse air quality impacts during occupation of the homes during any phase of the project. Construction vehicles will not be allowed to idle for more than 5 minutes at a time.

Potential for dust generated by construction traffic in unpaved areas will be minimized by use of the BMPs described in the response to comment L-55.

How will all of the project's pavement and roof areas impact air temperature? Will they create a heat island effect similar to that which occurs in urban areas?

Comment: L -60

The project's pavement and roof areas will not have an effect on air temperature in the area. Within the site there will remain approximately 110 acres of wooded areas including wetlands and uplands. Consequently, the wooded character of the site will be largely retained and portions of each of the existing vegetative communities will remain intact. In addition, of the disturbed acreage approximately 67 acres of it will be lawn areas and landscaped areas. Thus, only 27% of the site will be impervious areas. Overall, the trees will provide shade and the tree and lawn areas will cool the air via evapotranspiration. In addition, the site is located on a hill so that there will be good airflow among the buildings. There are not expected to be any hot spots, or noticeable increases in air temperatures in the adjacent areas. The areas noted above refer to the 1,518 unit SDEIS plan. The 900 unit Alternate Plan, described in FEIS Section IJ (page I-81) will result in less building and pavement coverage (45 acres instead of 69 acres), and more area devoted to permanent open space (196 acres as opposed to 177 acres).

15. ALTERNATIVES

Several comments suggested the inclusion in the SDEIS of single family detached homes as an alternative site development; some comments noted these single family homes should be developed in accordance with the regulations of the RR Rural Residential District. One comment suggested that the RR District would permit development of "about 30 homes" on the 243 acre site.

Other comments suggested the inclusion in the SDEIS of alternatives that would result in development of a retirement residential community at a greatly reduced overall density. One comment suggested a total of 150 units that would each cost \$533,000, as opposed to the proposed 1,518 units, each costing \$200,000.

Another comment noted that the Alternative section of the SDEIS includes a statement that, "Under a no-build no-action alternative, --- the property owner would be unable to develop the property, thus losing all economic potential from it." This is a false statement and

should be removed from the SDEIS. There are many possible uses that would provide a reasonable economic return, including development under the RR District regulations.

Comment: F-23,52; L-71,72,76; M₁-8; M₂4

The density and type of development proposed for this site is in accordance with a Stipulation of Settlement entered into by the Town of Deerpark and the applicant and are contained in an order of the NY State Supreme Court issued September 13, 1991 by Hon. Peter C. Patsalos (Index No. 6668/90).

In response to Planning Board requests to look at alternatives as mitigation, the applicant has prepared an alternative plan for the development of 900 housing units plus 50,000 square feet of commercial space. This alternative plan is described in FEIS Section I.J. The information provides a comparison of the impacts of the alternative with that of the SDEIS Plan. A 900 unit alternative and its impacts representing an approximately 40% reduction from the basic plan as initially presented in the SDEIS are presented in this FEIS.

It is noted that, after the initial DEIS public hearing, the applicant offered to sell the property to New York State for permanent open space use. A description of those negotiations and the reasons for their termination are summarized in a letter from the applicant's attorney, Joel Sachs, to the New York State Department of Environmental Conservation, with a copy to the Town of Deerpark, which letter can be found in SDEIS Appendix E.

Another comment questioned the inclusion, in the SDEIS Alternatives section, of "Early Phasing of the Second Access Point" and "Extending the Build-Out Period" as alternatives, since they do not change the project design or components.

Comment: L-75

There is no SEQRA regulation that limits alternative to those relating to project design or components.

In another commentor's discussion of alternatives, it was noted that the 243 acre site should be assessed at a higher value than its current assessed value, based on either the current

value of single family lots in the area or the presumed value of the property under its PRRD zoning

Comment: F-23

The comment is not related to SEQRA issues.

A commentor suggested consideration of the following alternatives:

- *Relocate commercial use to interior of site so that the project's residential units completely buffer it from the area's existing single-family homes. In this alternative, the project's primary entrance drive from Wilson Road should be centered in the area fronting on Wilson Road, so as to provide as much buffering of the road as possible from the adjoining properties*
- *Provide three full functioning access roads to the site: two from Wilson Road and one from Old Cochection Turnpike to mitigate traffic impacts.*
- *Provide the main access from Old Cochection Turnpike, "because of the lack of physical barriers to the road's improvement and reduced distance to Route 42, as compared to Wilson Road."*

Comment: L-76

The commercial use has been designed and located so that, with the buffer area and its setback provided along its Wilson Road frontage, its visual impact from nearby residential areas will be minimal, if at all. Its location also makes it easily accessible to Deerpark Village residents returning home or leaving the site, thus reducing vehicular movements. Further, this location is consistent with a feasible staging plan.

Extensive and detailed traffic studies have established that the currently proposed access points will result in a plan which will not have adverse impacts and will work well with the internal plan which is designed to avoid disturbance of wetland areas and minimize disturbance of steep slope areas.

16. CONSTRUCTION PERIOD

Any large earth moving equipment required during construction cannot be expected to remain on the site for the full projected 10 year construction period as indicated in the SDEIS at page IV-34.

What is the location of the staging area described in the SDEIS. The magnitude and 10 year duration of the construction period has not been addressed in the SDEIS.

SDEIS discussion of staging area for delivery of construction material/equipment should be expanded to include identification of the location of such an area.

The discussion also should elaborate: how such an area will function; size of trucks that will use staging area; will cement and gravel trucks use the staging area.

Comment: F-31,32; L-19

At this time it is intended that construction will occur in stages (as shown in the staging plan, see FEIS Section I.E at page I-46), and that it is likely that stages will overlap, i.e., as one stage is nearing completion, a second stage will be starting. Thus, it is likely, and practical for earth moving equipment to be retained on the site until the completion of necessary earth moving for the last stage.

Construction staging areas will be specifically designated as apart of a subdivision or site plan submission for each development stage and internal construction roads identified in each submission.

17. NOISE

The impact of noise pollution, with over a 100 fold increase in traffic, has not been considered.

Comment: F-28

Based on data included in the Supplementary Traffic Analyses presented in FEIS Section I.C (page I-13) and FEIS Appendix 1 (pages 6 to 22), there will not be 100 fold increases in traffic as a result of this project. The largest increases will occur on Wilson Road. Build PM peak hour traffic volumes on Wilson Road west of the project driveways (at the intersection with Route 97) would increase by a factor of 3 over the projected No-Build volumes for

2015, 2020, and 2025. Build PM peak hour traffic on Wilson Road east of the project driveways (at the intersection Route 42) would increase by a factor of 5 over the projected No-Build volumes for 2015, 2020, and 2025.

Because of the rural nature of the area and the fact that noise is measured on a logarithmic scale these increases would not result in significant impacts. With the rural nature of the area the noise levels are primarily influenced by the background noise sources such as wind in trees, birds, distant trucks, etc. With respect to perceived noise levels a tripling of traffic is only a 4.8 dBA increase, and a quintupling of traffic is a 6.7 dBA increase. However, given the fact that existing noise levels are far more influenced by background noise than traffic volumes (because of the intermittent nature of the traffic on Wilson Road), the absolute noise increases would only be 2 to 3 dBA. Studies have shown that increases of 2 to 3 dBA in ambient conditions are judged to be barely perceptible.

To help explain the relationship of traffic noise on Wilson Road to other ambient background noises, the following explanation is provided based on typical rural noise levels. A background level of 49 dBA (which includes birds, wind in the trees, cicadas, crickets, distant trucks, etc.) when added to a traffic contribution of 44 dBA would result in a total ambient noise level of 50.2 dBA. If the traffic noise contribution were to be based on a tripling of the traffic volume, the resulting ambient noise would be 51.9 dBA, an increase of 1.7 dBA. If the traffic noise contribution were to be based on a five fold increase of traffic, the resulting total ambient noise would be 53.1 dBA, an increase of 2.9 dBA. This example is valid only for Wilson Road and other very low traffic streets. On streets carrying heavier traffic volumes, for example Route 42, where the total ambient noise is more influenced by traffic volumes this specific example would not be valid. However, as can be seen below the percent increases in traffic volumes on Route 42 are far lower, so that the increases in total noise are still very low.

Build PM peak hour traffic on Route 42 on the segment between Wilson Road and Route 97 would increase by 40% over the projected no-build volumes for 2015, 2020, and 2025.

These increases would increase noise levels by less than two dB, a barely perceptible increase.

Table II -1
Average Ability to Perceive Changes in Noise Levels

<u>Change (dBA)</u>	<u>Human Perception of Sound</u>
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	“Dramatic change”
40	Difference between a faintly audible sound and a very loud sound

Source: Bolt Baranek and Newman, Inc. Fundamentals and Abatement of Highway Traffic Noise Report No. PB-222-703. Prepared for Federal Highway Administration, June 1973.

In addition, in reviewing the projected volumes the following relationships can be seen:

- The Build traffic on Wilson Road west of the site in any given future year would be approximately 30% higher than the No-Build volumes on Wilson Road to the east of the site in that year. This 30% difference in traffic is only a one dB noise difference, which is imperceptible. The point is that the increase of a factor of three in volumes on Wilson Road to the west would result in ambient noise levels essentially the same as along Wilson Road to the east in the same No-Build year.
- The Build traffic on Wilson Road east of the site would be approximately 15% less than the No-Build volumes on Route 42. The traffic noise contributions along Wilson Road east of the site would be essentially the same as along Route 42 in the No-Build condition.
- The Build traffic on Route 42 would be approximately 10% greater than the No-Build volumes on Route 97. Noise levels along Route 42 in the Build scenario would be essentially the same as along Route 97 in the No-Build scenario.

Thus, while Build traffic volumes and associated noise levels on specific segments will increase, they will result in nearly identical traffic noise levels as those in the No-Build condition along other roadways in close proximity. In addition, the absolute increases of 1 to

3 dBA due to the additional noise of increased traffic, would be barely perceptible and are not considered an adverse impact.

18. SEQRA PROCESS

General Comments

General comments included the following:

- *Residents who recently built their house on Wilson Road were not informed about the proposed Deerpark Village project or its status.*
- *Public comment period on SDEIS should be extended. Some comments requested an extension of 60 days to October 27, 2007.*
- *The Town of Deerpark Highway Department should provide the Planning Board with written comments on the SDEIS.*
- *The SDEIS should provide a greater level of design detail and more in-depth discussion of project impacts.*
- *The SDEIS document should be reformatted to make it easier for readers to understand.*
- *Planning Board's approval of the Comprehensive Development Plan whose impacts are described in the SDEIS could lead to the staged full development of the site in accordance with that plan.*
- *The Planning Board should have its own experts review the SDEIS and identify any additional data that should be provided prior to approval of the plan.*

Comment: C-1; E-8,9; H-10; J-5; K-6; L-1,2,77; M₂-8,13,14; M₄-9

The Deerpark Village project has been the subject of public hearings: on April 10, 1996 for the DEIS and July 25, 2007 for the SDEIS. These public hearings were the subject of public notices that were placed in accordance with the requirements of the regulations applicable to SEQRA, and the hearings were the subject of local newspaper coverage.

The public comment period on the SDEIS was extended by the Deerpark Planning Board from August 27, 2007 to September 27, 2007.

On July 9, 2007, a copy of the SDEIS was sent to Edward Hughson, Superintendent of the Town of Deerpark Highway Department. It was received by the Department on July 10, 2007 at 1:28 pm and accepted by F. Anthony.

Regarding the level of detail included in the SDEIS, as noted in Section I of the SDEIS (pages I-2 through I-4), the SDEIS examines the impacts of the Deerpark Village Comprehensive Development Plan. The SDEIS states:

The Comprehensive Development Plan, at a scale of 1" = 200', is not at the same level of detail as a site plan or subdivision plan which is normally reviewed by the Planning Board. Rather, it is a plan which sets forth the basic concepts of the proposal, its scale, the manner in which its infrastructure will serve the development, an outline of the areas to be developed and those, such as wetlands, which are not to be disturbed.

The SDEIS then notes that after approval of the Comprehensive Development Plan, there can be no development until the Town approves the Applicant's detailed site plan for the first stage of development, pointing out that the PRRC zoning establishes that the Town's review of the site plan application shall be accompanied by a SEQRA review, as necessary. Fully detailed development plans will be prepared for Town review as part of the Detailed Site Plan applications that will be submitted sequentially for each development phase.

Regarding the format of the SDEIS, it is noted that the Deerpark Village SDEIS follows a format used and accepted in numerous New York State projects in which an EIS has been required. This format has been developed in accordance with the requirements of §617.9(b) of the NYSEQR regulations.

The comment indicating that the approval of the Comprehensive Development Plan could lead to the staged full development of the site in accordance with that plan is acknowledged and accepted.

The Planning Board's expert consultants, Stantec, performed detailed reviews of the DEIS. Their technical comments are found in Appendix 13 and the response to those comments is found in FEIS Section II.B and in appendices referenced in those responses.

SDEIS Based On Old Data

The SDEIS needs to be replaced because it is based on data that is more than 15 to 20 years old, and when it is replaced it should be "reopened to public comment".

Comments: L-78, 80; M₂-9

The SDEIS, found complete on June 13, 2007, was not based on data that was more than 15 to 20 years old. The June 2007 SDEIS supplements and updates the November 1995 DEIS (as revised to reflect the January 9, 1996 review comments of the Planning Board's consultants). The SDEIS updates the following components of the DEIS:

- Ecology (Vegetation and Wildlife)

New field surveys of wetlands, flora and fauna were conducted in 2005 and are described in SDEIS Sections III.C and III.D (pages III-13 and III-19).

- Air Quality

Data from the NYSDEC 2003 Annual Air Quality Survey is presented and project impacts are assessed in relation to the current NYSDOT guidelines (Project Environmental Guidelines, PE 1.1 – 1999) in SDEIS Section III.E (page III-26).

- Land Use, Zoning and Area-wide Planning

- Land use field survey updated May 2005. See SDEIS Figure IV-1 (follows page IV-1).
- Zoning information updated to reflect current zoning as of 2007. See SDEIS Section IV.B and Figure IV-2 (follows page IV-6).
- Proposed development plan compared to Town Comprehensive Plan adopted in 2003 and Orange County Housing and Community Development Plan for Fiscal Years 2005-2009. See SDEIS Section IV.C (page IV-9).

- Socio-Economic (Population, Housing and Employment)

- Description of existing conditions updated to reflect 2000 census data (latest available data). See SDEIS Sections IV.D and IV.E (page IV-12 and IV-16).

- Socio-Economic (Taxes)
 - Discussion and analyses updated to reflect 2004/2005 tax data (latest available data). See SDEIS Section IV.F (page IV-19).

- Traffic
 - New traffic counts were taken in April 2004. The counts were recorded at 8 intersections, 6 more than the 2 included in the DEIS.
 - Traffic impacts were analyzed at all 8 intersections based on the April 2004 traffic counts.
 - See SDEIS Section IV.G (page IV-22).
 - As noted below, additional traffic studies (including traffic counts in 2004, 2008 and 2009) were completed as part of this FEIS.

- Water
 - Conducted a new well testing program in 2004.
 - Evaluated water impacts based on the 2004 well testing program.
 - See SDEIS Section IV.H (Page IV-44).

- Stormwater Management
 - The stormwater management system was revised (in conformance with the NYSDEC SPDES regulation enacted on January 8, 2003) to control both the quantity and quality of stormwater discharge in the construction and post construction stages.
 - See SDEIS Section IV.J (page IV-69).

- Project Development Plan
 - The development plan was revised to reflect new information regarding the new mapping of wetlands boundaries in 2005, as shown in SDEIS Figure II-3 (following page II-1).

In response to public and agency comments on the SDEIS, the following additional studies and plan modifications are included as part of this FEIS:

- Sewage Treatment Plant

In place of the RBC type of plant (rotating biological contactor), proposed in the SDEIS, the applicant is proposing to utilize an Alternating Aerobic/Anaerobic Fixed Film Media Trickle Filter System STP. This STP employs a triple stage aerobic and triple stage anaerobic process as well as fixed film contact with biota, and is considered superior to the RBC process. It is described more fully in this FEIS in Section I.H (page I-75) and Appendix 5 (“Description of Alternating Aerobic/Anaerobic Fixed Film Media Trickle Filter System Sewage Treatment Plant”).

- Traffic

New traffic counts were made on March 11, 2008 at two intersections (Route 42/Wilson Road and Routes 42/97). Comparison of the 2008 counts to the 2004 counts of the SDEIS shows very little change from 2004 to 2008. Traffic volumes on Route 42 and Wilson Road decreased slightly, while on Route 97 they increased slightly. This is more fully discussed in this FEIS in the section titled Responses to SDEIS Comments.

Based on NYSDOT data for CR 53 in Fallsburg in Sullivan County, the existing traffic volumes on Routes 42 and 97 in Deerpark were adjusted to reflect seasonal increases attributable to the location of these routes within the Scenic River Corridor. (See FEIS Section I.C, "Supplementary Traffic Analyses" at page I-13)

A new traffic analysis was completed based on existing traffic volumes that were adjusted to reflect the increased volumes attributable to seasonal factors. This analysis is presented in the FEIS Section I.C.

The new traffic analyses presented in FEIS Section I.C recognize the potential need for the provision of a traffic signal at the Routes 42/97 intersection at a point in time when more than 80% of the proposed 1,518 housing units have been completed. Given the proposed staged development of the property, the Applicant has agreed to install the traffic signal at the earliest of the following two timing criteria: when an updated traffic study for a subsequent stage would show a level of service E or F, subject to New York State Department of Transportation approval and meeting the signal warrants established in the Manual of Uniform Traffic Control Devices; or at any subsequent period when NYSDOT approval is obtained.

In response to questions by the Town Planning Board and its review consultant, Alfred Fusco, regarding the validity of using the NYSDOT data for CR53 in Fallsburg to estimate the seasonal adjustment factor for the Deerpark FEIS traffic analysis, Parish & Weiner commissioned a summer 2009 survey for the heaviest volume intersection, Routes 42/97.

The new traffic count at the intersection of Routes 42 and 97 was made on Wednesday, July 15, 2009 from 7:00 to 9:00 AM and from 3:30 to 6:30 PM. The peak hours were determined to be 8:00 – 9:00 AM and 4:15 – 5:15 PM. The resultant peak hour volumes are shown in the top two diagrams of FEIS Figure I-2 on page I-22, while the two diagrams at the bottom of Figure I-2 show the peak hour volumes that were utilized in the summer season analyses based on the NYSDOT data for CR53 in Fallsburg. Comparison of these figures shows the actual traffic counts are lower than those which were calculated on the basis of the CR53 NYSDOT counts. This analysis establishes that the assumptions used in the FEIS analysis were valid and, in fact were conservative, because they projected larger impacts, than can be expected. It is also noted that the 900 unit development alternative would reduce traffic generation by about 40%.

FEIS Section I.C includes new analyses of:

- The safety of the stopping distances at the Wilson Road intersections with Routes 42 and Route 97.
- Traffic accidents on Routes 42 and 97.
- Visual Impact
 - An analysis of the project's visual impacts is included in this FEIS (see Appendix 8 "Visual Impact Analysis").
- Historical and Archeological Resources
 - A literature review and archeological sensitivity assessment report was completed for the proposed project (see FEIS Appendix 2 "Archeology Sensitivity Assessment").
- Additional Field Studies of Flora/Fauna
 - A field survey of project flora/fauna was conducted in July 2008. The results of this survey are represented in a report titled "Rare Plant Survey for Deerpark Village" (see FEIS Appendix 3). The survey results also are described in this FEIS in Section I.D, "Supplementary Ecology Report" (page I-42). The report indicates that additional studies are not required.
- Additional Information Regarding Adequacy of Hospital Resources
 - Bon Secours Hospital, in a 2008 letter, has indicated their ability to accommodate the project's gradual staged increase in population (see FEIS Appendix 4). The hospital states that the project will be built in stages and they can handle the gradual increase in service required.
- Land Use Plan
 - SDEIS Figure II-3 (Land Use Plan, Circulation and Open Space, September 2005) has been revised to show the location of each stormwater retention area. A copy of the revised Figure II-3 (dated June 2008) is included in FEIS Section I.E ("Revised Plan Drawings", see Page I-50).
- Staging Plan
 - The Staging Plan, included as part of the Comprehensive Development Plan submitted in conjunction with the SDEIS, has been revised. The revised plan is dated July 2008, and is included in FEIS Section I.E (see page I-50). The staging area boundaries have been slightly modified to reflect the inclusion of related storm drainage retention areas and other infrastructure elements.

The 2006 Zoning Revision, Referral To County Planning Board

The Town Board should have required the preparation of the Deerpark Village SDEIS prior to its having revised the zoning law in 2006 to establish a Planned Residential Retirement District for the Deerpark Village site.

The Town Board did not satisfy their SEQRA obligations when they reinstated the site's PRRD zoning classification in 2006. "The Town Board's review did not even come close to satisfying the 'hard look' standard required under SEQRA." A new EIS should have been required and comments from the 1996 public hearing on the Deerpark DEIS should have been addressed prior to the 2006 reinstatement of the PRRD for the site.

"The Town Board should have challenged the 'diligence' with which the Deerpark Village Associates have pursued this development in that period of time (between 1996 and 2006). Absence of diligent pursuit by the Applicant are sufficient grounds for the Town to have sought an annulment of this outdated judgment."

Additionally, the Town Board failed to refer its 2006 reinstatement of the site's PRRD zoning designation to the County Planning Board, as required by §239-m(2) of NY General Municipal Law.

A new SDEIS is required to respond to the requests for new and updated information.

The Town's reinstatement, in 2006, of the PRRD zone for the subject site should have been referred to the Orange County Planning Board in accordance with the requirements of Section 239-m. This is because the site "borders the Mongaup Wildlife Management Area which is considered by the NYSDEC as an outdoor recreation area (see www.dec.ny.gov/outdoor/8297.html)."

Comments: E-10; M₁-1,10; M₄-8

These are legal and procedural issues that are not related to the examination of this environmental impact analysis.

Extension of Comment Period; Removal of SDEIS from Web Site on 9/14/07.

Wilson Road Coalition notes their disappointment that their request for a 60-day extension of the initial comment deadline of August 25, 2007 was not granted, and that only a 30-day extension was granted.

*Wilson Road coalition notes "that for a comparably sized project with a similar magnitude of impact, a 90-day public comment period was not considered adequate and was subject to criticism (see townofnewburgh.org, *The Marketplace*, Letter #12 from Keane & Beane, P.C., dated July 20, 2006)."*

“We further direct the Board’s attention to the fact that the notice of the allowance of the extension was not publicly available until mid-September (after the initial deadline of August 26, 2007). Thus, persons or agencies who may have considered submitting comments were not aware that the extension had been granted.

“Finally, we note that on September 14, the townofdeerpark.org web site disappeared and the SDEIS was no longer available on the web for review. Pursuant to NY Environmental Conservation Law §8-0113, the SDEIS should be posted on a publicly available internet web site prior to acting on the proposal which is the subject of the environmental impact statement.”

Comments: M₃-1; M₄-10

The public comment period established by the Planning Board exceeded the minimum requirements of the SEQRA regulations.

The SDEIS was and is posted on the Town’s web site.

Assessment and Mitigation of Impacts as Project is Built

The developer’s statement that project impacts will be assessed and mitigated as the project is constructed – i.e., doing new traffic and water studies as the project is built “is a violation of the manner in which the SEQRA process is required to unfold”. These impacts need to be evaluated “early in the planning and decision-making process”.

Comment: L-79

The SDEIS and this FEIS totally and properly examine the impacts of the large scale Comprehensive Development Plan. Inasmuch as the plan will be implemented in separate stages, each requiring a review of a plan with far more engineering detail and design proposals for that stage, it is proper procedure for a subsequent environmental review to be conducted for that stage and to include in that review updated studies for project and surrounding area conditions that might have changed over time. This is a process often used for large scale projects and is fully protective of the environment.

Need for Supplemental Document

Planning Board should require preparation of a supplemental document to address:

- archeological and historical resource impacts*
- traffic impacts*
- ecological impacts*
- stormwater runoff impacts analyzed in greater detail*
- staged development*

Comment: M₁-9

In response to a number of SDEIS comments and requests for updated information, supplemental studies of these subjects were performed and are found in FEIS Appendices 1 through 16, as well as in FEIS Section I (sub-sections C through I).

Inasmuch as none of these studies found any new or additional significant environmental impacts there is no basis for a requirement to prepare a Supplemental DEIS. It is anticipated by the SEQRA regulations that DEIS comments be addressed in an FEIS.

Current Review Stage

Requests “clarification for which stage the applicant and Planning Board considers the review.”

- Was formal Scoping of EIS done?*
- Lack of detailed site plans make SDEIS insufficient to assess actual environmental impact and formulate appropriate mitigations.*

Suggests lead agency “should request a Supplementary DEIS with more site specific details.”

There is no documentation of the comments received on the January 24, 1996 DEIS. “If the applicant considers these concerns irrelevant due to the long period of time that has elapsed, then similarly, the prior acceptance...should also be considered irrelevant and the procedure should start over...”

Comments: M₂-1; M₂-3,5,6,7,10

The applicant submitted to the lead agency a proposed scoping for the SDEIS and received no response. There is no requirement for formal scoping.

The PRRD zone establishes that first there is to be a SEQRA review of a Comprehensive Development Plan, and subsequently there are to be SEQRA reviews of detailed site plans.

The comments received on the original SDEIS are in the environmental record maintained by the lead agency. Inasmuch as the SDEIS was a complete update and review of each and every subject item of the DEIS, it was appropriate to consider those comments in the updated document which has received its own review by the lead agency, its consultants and the public. The public was not prohibited from repeating its DEIS comments during the public comment period for the SDEIS.

B. RESPONSES TO COMMENTS OF PLANNING BOARD CONSULTANT AND OTHER AGENCIES

The documents containing the comments of the Planning Board consultant and of other government agencies are found in Appendix 13. Responses to the comments in those documents are presented below.

1. PLANNING BOARD CONSULTANT (See Document GG in Appendix 13, pages 17 to 38)

The subject areas and comment numbers cited below are as noted or marked on the copy of Document GG in Appendix 13.

Overall Project Summary

Comment GG/OPS-1: Requests inclusion in SDEIS Summary section of quantitative assessments of water system capacity, sewage treatment plant capacity, miles of roadways, and project density.

Project information regarding the water system is presented in SDEIS Section IV.H (page IV-44); sewage treatment plant in SDEIS Section IV.I (page IV-57); project density in SDEIS Sections IV.A, B and C (pages IV-1, 3 and 9) and in SDEIS Figure II-3 (following page II-1).

The 1,518 unit project described in the SDEIS includes 6.1 miles of project collector streets.

The following chart compares the characteristics of the 1,518 unit SDEIS plan and the 900 unit alternative plan described in FEIS Section I.J.

	SDEIS Plan	Alternative Plan
AM & PM Peak Hour Generation		
AM	393 vehicles	274 vehicles
PM	745 vehicles	603 vehicles
Daily Domestic Water Consumption	272,190 gpd	163,400 gpd
Daily Sanitary Sewage Generation	370,200 gpd	222,000 gpd
Acreage of Impervious Surfaces		
Roads and Parking	35 acres	27 acres
Building Footprint	30 acres	18 acres
Total Impervious Surfaces	65 acres	45 acres
Permanent Open Space		
Natural Open Space	110 acres	136 acres
Landscaped Open Space	67 acres	60 acres
Total Permanent Open Space	177 acres	196 acres
Estimated Population	2,657	1,575
Roads		
Collector Roads	6.1 miles	5.5 miles
Residential Frontage Roads	4.3 miles	2.6 miles
Total Road Length	10.4 miles	8.1 miles

Comment GG/OPS-2: *SDEIS Summary Section should explain why the alternatives of on-site water supply and on-site waste water treatment were chosen and should provide quantitative data for water use and waste water generation, water sources and sewage treatment.*

The proposed use of on-site water supply and waste water treatment systems was based on the absence of any viable alternatives.

Quantitative data regarding the water supply and waste water treatment facilities are shown in the chart above under Comment GG/OPS-1.

Comment GG/OPS-3: *The summary section of the SDEIS should discuss the impacts of the project on existing wells.*

SDEIS Summary Section I.D (“Mitigation of Adverse Impacts”) includes such a discussion under the heading “Potential for water level draw-down in nearby residential supply wells” (see SDEIS pages I-12 and 13).

Comment GG/OPS-4: *The description of the project should include discussion of all proposed site improvements (roads, sanitary and storm sewers, water supply) and pertinent information regarding water demand, storage tank capacity and capacity of sewage treatment plant.*

The SDEIS includes a discussion of proposed project roads in Section II (see page II-4). Proposed sanitary and storm sewers and water supply improvements are discussed in SDEIS Sections IV.H, I and J (pages IV-44, 57 and 69). The sizes of the proposed water storage tanks are noted in the SDEIS (see SDEIS Figure IV-25, following page IV-56) and are also discussed in this FEIS in Section II.A (“Responses to Comments of the Public”) in the subsection titled “Water Supply System” at page II-13. Information regarding water demand and sewage treatment plant capacity is found in SDEIS Sections IV.H and I (see pages IV-44 and 57).

Comment GG/OPS-5: *The discussion of project open space should provide a breakdown of how the open space is divided into three categories: wetlands, steep slopes and unconstrained areas.*

FEIS Section I.I (“Additional Data Regarding Project Open Space” at page I-80) includes the following additional information regarding project open space.

The 243 acre project area will have 177 acres devoted to open space. These 177 acres of open space include:

- 32.25 acres of wetlands
- 1.2 acres of steep slopes over 25% grade
- 12.7 acres of steep slopes 15% to 25% grade
- 11.8 acres of stormwater drainage detention ponds or grass swales
- 119 acres of unconstrained open space

The alternative plan for 900 housing units, described in FEIS Section I.J, would have 196 acres devoted to open space (19 acres more than the 1,518 unit plan initially proposed), and 13 of these 191 acres would not be constrained by wetlands, steep slopes, detention ponds, or drainage swales.

Comment GG/OPS-6: *The SDEIS should include sufficient information related to the phasing of the project that demonstrates the rational of the proposed stages of development (e.g., specifically how the proposed residential, commercial, and recreational development will be planned/coordinated with the development of all proposed infrastructure improvements).*

See response to GG/PSMR-2 (below) and new staging plan map included in FEIS Section I.E (page I-46 in the sub-section titled “Revised Plan Drawings”).

Comment GG/OPS-7: *In the SDEIS discussion of required approvals, the types of proposed transportation corporations should be indicated.*

Orange County Department of Health approval for the sanitary sewage system and treatment plant is not required and should be deleted.

NYSDEC approval is needed for the proposed wells but not for the proposed water distribution system.

NYSDEC approval is not required for the disturbance of federally regulated wetlands.

With respect to the types of transportation corporations, the narrative regarding Town of Deerpark Town Board at page II-7 of SDEIS Section II.E. is revised to read as follows:

“Town of Deerpark Town Board – transportation corporations for sanitary sewage system and water supply system”

The following statement is deleted from page II-7 of SDEIS Section II.E:

“Orange County Health Department – sewage treatment plant.”

The narrative regarding NYS Department of Environmental Conservation, at page II-7 of SDEIS Section II.E, is revised to read as follows:

“NYS Department of Environmental Conservation – State Pollution Discharge Elimination System SPDES) permit for discharge of sewage treatment plant effluent and for construction activities; Water supply permit for the taking of water from wells; Permit for construction of collector sewers and sewage treatment plant.”

Wetlands/Wildlife

Comment GG/WW-1: *When detailed site plans are developed, the applicant must confirm the locations of wetland boundaries and subject the development plan for approval by relevant regulating agencies.*

In the event the site wetlands are reclassified as NYS-regulated, a minimum 100 foot non-disturbance buffer will have to be provided around the wetlands boundary.

All project wetlands and all development in their vicinity are subject to all applicable regulatory requirements applicable at the time of final approval.

The wetlands are not currently under the jurisdiction of NYSDEC. As each site plan phase is presented for approval it would be required to adhere to all governmental regulations applicable at that time.

Comment GG/WW-2: *The ACOE Nationwide Permit referenced appears to be incorrect. NP 39 (“Residential, Commercial and Institutional Developments”) would appear to represent the ACOE permitting that would apply. The applicant should confirm the NP that applies, and provide a summary of the regulations/notices/etc. that apply to the project.*

Either NP 14 (as cited in the SDEIS) or NP 39 (as cited in the comment) would be appropriate. The same process and procedure apply to both since the wetland disturbance is 0.23 acres, as noted in the SDEIS.

Comment GG/WW-3: *Table III-2 presents soil limitations for the various soils which exist on site. Almost every soil type contains severe to moderate limitations to development. The applicant should therefore present mapping to illustrate the intended development concept over the soils boundaries/designations to better highlight such concerns, and then present a discussion of how these limitations will either be avoided or dealt with.*

While these soil classifications provide general indications of soil conditions on a macro-scale, they are often inaccurate when utilized on a micro-scale for site design.

As part of detailed site plan studies and plans prepared for a building permit, soil borings are taken in the specific areas where structures are to be located and the structural foundation design then reflects the specific soil conditions to be encountered.

Comment GG/WW-4: *SDEIS should include “at least an outline listing of the steps to be employed” in the event blasting is required for rock excavation.*

These steps are outlined in the SDEIS on pages V-6 and 7 (Identification of Adverse Environmental Impacts Which Cannot Be Avoided and Mitigation of Adverse Impacts).

Comment GG/WW-5: *Previously prepared consultant reports on wetlands, wildlife and vegetation (prepared in connection with the DEIS and SDEIS) should be made available. Additional evaluation should be provided regarding the possible on-site presence of bald eagle nesting sites and of rare or state-listed flora, fauna or other significant habitats.*

The wetlands, wildlife and vegetation studies conducted as part of the DEIS and SDEIS are fully documented in the bodies of those documents. There were no separate reports.

Additional studies were conducted in July 2008. A report summarizing the results of these studies is presented in FEIS Appendix 3 (Rare Plant Survey Report).

FEIS Appendix 7 (Species List) presents additional information regarding the Bald Eagle and other species of special interest.

Comment GG/WW-6: *There is general discussion of providing “edge habitat” and wildlife corridors within the project, although this is not apparent by the development concept presented. Development and project roadways appear to almost surround the wetlands areas, leaving little, if any, possibility for such mitigation. The applicant should better describe and illustrate what areas are being set aside and protected to provide this mitigation. The “interconnecting buffers” between proposed residential clusters appear to be very limited in width. A discussion on what separations would be appropriate to maintain these “buffers” as viable wildlife corridors should be included.*

All of the wetland areas are surrounded by 100 foot buffers which are deemed to be fully protective of the wetlands and their wildlife habitat. There are no protected species on the site which would require extraordinary buffer or corridor dimensions.

We have investigated an alternate plan to mitigate the impact on wildlife. This would allow 19 acres of additional open space.

Land Use, Site Design, Community

Comment GG/LUSDC-1: While the text dismisses the intent of Local Law No. 1 of 2005, concerning abutting properties utilized as gun clubs, the applicant should acknowledge what protections/mitigation can be offered to the community to continue to permit the gun clubs to utilize their properties for these historical uses.

This proposal does not assume any prohibition of uses on adjacent properties. However, as with any activity, it is the responsibility of the property owner engaging in that activity to take such precautions as are necessary and proper for protecting its neighbors. Any regulations affecting the gun club property which are deemed to be necessary to protect the health, safety and welfare of the public can only be imposed on the gun club by a public body, and are not deemed to be the responsibility of the project applicant. The design of the site plan at each stage will consider the relationship of the proposed development to the land use characteristics of the adjacent development.

Comment GG/LUSDC-2 & 3: The applicant should provide conceptual layouts of building styles, architectural treatments, approximate number/layout of units and parking requirements and pedestrian connections within each block of housing proposed, which will be utilized in the development of more advanced plans as the application moves through the Planning Board review process. Similarly, a conceptual layout of the various recreation facilities and pedestrian connections to be provided with the development clusters should be illustrated.

Architectural concepts for the commercial area to be provided on site should likewise be provided. This could also include a discussion on the expected hours of operation, which would be of interest to future residents and area neighbors. Utilizing timers in order to minimize the hours that any parking lot lighting is utilized should also be considered.

To the extent required by Town statutes these will be provided as part of site plan and/or subdivision application review documents. The Planning Board will have architectural and elevations for their review at each site plan presentation.

Comment GG/LUSDC-4: *While the SDEIS describes a wide variety of potential uses for the “commercial” area, at least some of these (i.e.; “children day care center”) would seem unnecessary, recognizing the adult nature of the intended resident population. Can the applicant better identify/limit possible uses, for the understanding of both the Board and the public?*

A children day care center was cited as a possible use only because it was deemed to be a use that might possibly be of interest to the neighborhood’s current residents and was mentioned by some residents during informal discussions. Surely, it will not be needed for the use of Deerpark Village residents.

The specific uses cannot be identified as they are not known. However, they will, for economical reasons, be those that would best serve the daily needs of the Deerpark Village residents.

Comment GG/LUSDC-5: *The mechanism to be utilized to control/limit age of project residents should be better explained. Similarly, there is no mention of age limits of a spouse residing on site. Lastly, the matter of allowing children over the age of 19 will be allowed to reside with parents over the age of 55 should be better understood. These issues could well affect the volume of traffic in the area as well as other services, and shall be explained.*

Occupancy regulations are established in the PRRD statute. They will be included in the condominium plan or homeownership organization plan submitted to the State Attorney General. They will then become a requirement along with many other occupancy restrictions. The Town will have the right to monitor adherence to this zoning requirement in the same way that it monitors all uses in the Town for adherence to the zoning code.

Comment GG/LUSDC-6: *The text in various locations notes that NO (pre-K to 12 grade) school age children will result from the development. What means are available to assure that this doesn't actually occur, as potential adverse impacts to the local school district have not been studied to any degree? It is assumed from the applicant those attending post-school activities, technical schools or colleges are not under similar restrictions?*

It is well established that retirement communities of this type, and with these restrictions, do not by and large generate any school age children. While there can be an extraordinary circumstance, e.g., parents passing away and grandparents needing to care for a child, this

would only be permitted for a short period of time and, if continued, the household would be required to relocate.

While certainly some residents may attend post school activities, technical schools or colleges, this would not place any burden on the School District.

Comment GG/LUSDC-7: *The applicant should provide a more detailed summary of expected tax revenues from the project, by taxing jurisdiction, as well as possible budget impacts/costs to the community that will result from the approximate 2,700 person population that will reside on site.*

This information can be found in the following SDEIS sections:

IV.F “Socio-Economic Conditions - Taxes” (page IV-29)

IV.L “Community Services and Facilities – Emergency Services” (page IV-81)

IV.M “Community Services and Facilities – Schools” (page IV-83)

IV.N “Community Services and Facilities – Recreation/Open Space Areas” (page IV-84)

IV.O “Community Services and Facilities – Administrative” (page IV-86)

Comment GG/LUSDC-8: *The entity that will be responsible for the maintenance of all site improvements (roads, drainage facilities, utilities, etc.) should be explained.*

This will be either a condominium or home owner association responsibility with cost paid for by the development’s occupants. In accordance with the prospectus to be reviewed and approved by the New York State Attorney General and NYS Realty Law, all site improvement costs to be borne by the development, none by the Town of Deerpark.

Comment GGLUSDC-9: *Written confirmation should be obtained from the emergency service providers (Police, Fire and Emergency medical providers) to confirm that they have sufficient staffing and facilities to properly respond to emergencies at the site.*

See “Response to Comments of the Public” in FEIS Section II.A under the sub-section title “Community Services”. Also, see letter from Bon Secours Hospital in FEIS Appendix 4 and Letter from Port Jervis Volunteer Ambulance Corp., Inc. in FEIS Appendix 9.

Comment GG/LUSDC-10: Beyond the “mitigation” offered for recreation and open space, the applicant should confirm that recreation fees will be paid by the developer to the Town for all housing units proposed.

At each development stage the developer will pay recreation fees in accordance with applicable fee schedules established by the Town.

Comment GG/LUSDC-11: The applicant should complete an archeological sensitivity assessment, and the report should discuss mitigating measures with respect to sensitive resources.

This assessment was conducted by the applicant. It is presented in FEIS Appendix 2 (“Archeological Sensitivity Assessment”). The recommendation section of Appendix 2, at page 11, states:

“It is understood that the project will be done in phases, and each phase will be the subject of detailed site plan review and approval. While there is no specific basis for assuming that there are important historical resources on the site, it would be a prudent part of each phase review process to conduct shovel test on a 50 foot grid for the areas to be disturbed by that phase of development.”

This will be accomplished prior to each stage and presented to the Planning Board.

The applicant agrees to conduct such shovel tests in conjunction with the submittal of the site plan applications that will be required for each development phase.

Stormwater Management

Comment GG/SM-1: The site hydrologic soil groups should be identified.

The hydrologic soil groups are identified in SDEIS Section III.A (see page III-7).

Comment GG/SM-2: It is noted that, in all cases, the post-development rates shown exceed the pre-development rates. Since the table also includes a column headed “Storage Volume required (ac/ft),” it should be confirmed whether the post-development rates are prior to attenuation within the stormwater basins. Otherwise, if these rates are after attenuation, the design would not fulfill the requirement of zero-net increase in runoff rate. Therefore, this should be clarified.

The noted post development rates are prior to attenuation.

Comment GG/SM-3: *The table indicates that the storage volume data provided for the 1-Year Storm event is that volume required for Channel Protection. The table also includes data for storage volumes for the 10-Year Storm event (Overbank Flood) and the 100-Year Storm event (Extreme Storm). Since it is not otherwise identified, we have to assume that these volumes would be accumulated volumes needed for each higher-year storm event. However, the data provided for two of the three Drainage Areas indicate that a greater storage volume is required for the 1-Year Storm event than for the 10-Year Storm event. Therefore, these figures warrant further review.*

The channel protection volume and the 10 year required volumes are cumulative calculations, meaning that both volumes are required to be provided in the pond design. It should be noted however that the volume calculations for the 10 and 100 year storm events are estimations only, to provide a general idea regarding the storage volumes required to mitigate peak rates of runoff. During the detailed design phases of this project, modeling of each stormwater practice will be preformed to route each design storm hydrograph through the proposed stormwater structures.

Comment GG/SM-4: *SDEIS should note that the storm drainage plans presented as part of the Comprehensive Development Plan are conceptual in nature, and that more detailed plans (including more detailed stormwater modeling) will have to be prepared and submitted for Town review and approval prior to construction.*

The SDEIS contains such notation in Section I.A (Summary) at pages I-2, 3 and 4 (last paragraph on page I-2, all of pages I-3 and I-4 up to the end of Section A). During each site plan review stage the specific pre and post development periods will be reviewed under the most current guidelines by the Town Engineer, to include low impact development and best and practical methods.

Comment GG/SM-5: *Asks why SDEIS does not include statement that post-development stormwater drainage from Area III will not exceed pre-development discharge.*

Also questions whether data in Table IV-16 indicating higher post-development flows is inconsistent with other statements in SDEIS indicating that post-development stormwater discharges will not exceed pre-development discharges.

The second paragraph on page IV-79 of the SDEIS states the following with respect to Drainage Area III:

1. All stormwater from Drainage Area III will be discharged to the wetlands in Drainage Area III.
2. The rate of stormwater discharge to this wetland will not exceed the pre-development rate.

SDEIS Table IV-16 (page IV-79), indicates that the post-development rate of stormwater flow will exceed the pre-development rate in all three drainage areas. However, through the inclusion of detention ponds which will provide the noted storage volumes in each area, the rate at which these flows will be discharged from each area will not exceed the pre-development rate of discharge.

During each stage of development the peak storm post development stormwater discharges offsite will not exceed the pre-development discharges offsite.

Preliminary Stormwater Management Report (Appendix D)

Comment GG/PSMR-1: Comment suggest the insertion of additional narrative to the section titled “Introduction” in the “Preliminary Stormwater Management Report” in SDEIS Appendix D.

The following narrative is added following the third sentence of the “Introduction” in the referenced document:

“The post-development flow rate for stormwater will be attenuated so as not to exceed pre-development rates. Wetlands will not be utilized for treatment of stormwater (either quality or quantity).”

The following narrative is added at the end of the SDEIS Appendix D section titled “Introduction”:

“As part of the Site Plan Application process, the applicant will revisit the stormwater modeling at a later date once the site plans have been developed to a higher level of detail, which will then allow the stormwater management

design to be finalized based upon a more accurate model of the development.”

Comment GG/PSMR-2: *Staging of the project relative to stormwater management should be added to SDEIS Appendix D.*

The following narrative is added as a new second paragraph in the SDEIS Appendix D section titled “Introduction”:

“The Staging Plan has been revised to show that at each stage the construction of the detention pond(s) needed to serve that stage will be in place before there is any site disturbance which would change drainage patterns.”

A copy of the revised Staging Plan (dated July 2008) is included in FEIS Section I.E (page I-57).

Comment GG/PSMR-3: *Indicate the design basis that will be used for the stormwater pipes and open swales.*

The design of stormwater pipes and open swales shall be based on all applicable local and state laws and regulations, and the design plans will be prepared by a New York State Licensed Professional Engineer. The stormwater management plan will identify the entire stormwater system as required by the NYSDEC.

Comment GG/PSMR-4: *In relation to the discussion of soil groups on page 5 of SDEIS Appendix D, information should be provided regarding the hydrologic soil groups of the on-site drainage areas. Additional information should be provided to identify the soil types and hydrologic soil groups for all off-site areas included in the drainage areas.*

The following narrative is added to SDEIS Appendix D, at the end of the first full paragraph on page 5.

“Soils within the drainage areas evaluated are consistent with those found within the property boundaries and include Arnot Lordstown complex hydrologic soils group C/D, Swartswood Gravelly Loam hydrologic soil group C, and Erie extremely stony soil hydrologic group C.”

Comment GG/PSMR-5: *In SDEIS Appendix D, on page 6, under “Existing Conditions Analysis”, the discussion should include information related to both the computed runoff curve numbers (CN) and times of concentration (t_c) for each of the drainage areas.*

SDEIS Appendix D is revised to include the following narrative at the end of the section titled “Existing Condition Analysis” and prior to the subsection titled “Area 1”:

“Drainage area I under the undeveloped conditions consists of 165 acres wooded areas in both hydrologic soil group c and d, with a weighted curve number of 74. The calculated time of concentration for this drainage area is 0.681 hours.

“Drainage area II in the pre-developed state is comprised of 261 acres of wooded areas within both type C/D hydrologic soils groups, with a weighted curve number of 73. The Time of concentration for this watershed is 2.265 hours.

“Drainage Area III under existing conditions contains 78 acres of fair woods within hydrologic soil groups C and D, with a weighted curve number of 76. Time of concentration for this drainage area is 0.492 hours.”

Comment GG/PSMR-6: *In SDEIS Appendix D, the first full paragraph on page 7 should include a reference to the mapping found in Appendix A of that document.*

The first full paragraph on page 7 of SDEIS Appendix D is revised as follows:

The period at the end of the sentence is removed and the following narrative is added:

“and on the map found in Appendix A of this document.”

Comment GG/PSMR-7: Requests that the “Post-Development Analysis” section in SDEIS Appendix D include a narrative regarding the conceptual nature of the design at this time and the need for more detailed design at the Site Plan Application stage.

The following narrative is added to the above referenced section of SDEIS Appendix D, at page 7, as a new paragraph following the second paragraph of that section:

“It should be noted that this analysis is conceptual and that at the time of a site plan submission for each stage there will be a detailed engineering study to establish the specific drainage impacts of that stage and detailed design of the necessary mitigation for those impacts. These will be incorporated in the SPPP which will be prepared for that stage.”

Comment GG/PSMR-8: Requests clarification in SDEIS Appendix D regarding the location of portions of detention ponds within portions of a wetland buffer area.

The following paragraph is added to the SDEIS Appendix D section titled “Post-Development Analysis” at the bottom of page 8 in the sub-section titled “Area III”:

“There are two instances in Drainage Area III where the project design requires that detention ponds be installed within portions of the wetland buffer area, but not within the wetland. This design is deemed to be a sound practice in terms of both an appropriate use of the buffer area and a protection of the wetland itself. It should be noted that studies have found that a 50 foot buffer is required for water quality wetland protection purposes and this plan provides a 100 foot buffer for that purpose.”

It is further added that if the NYSDEC designates the wetland as State, with a 100 foot buffer, all stormwater facilities would be designed out of the buffer area.

Comment GG/PSMR-9: Requests that run off volume noted in SDEIS Appendix D section titled “Storm Water Controls” in the sub-section titled “Water Quality” should identify a more representative number.

The following narrative is added following the second sentence in the above referenced sub-section of SDEIS Appendix D:

“A more representative number would be 1.15 inches based upon Figure 4.1 “90% Rainfall in New York State” as found in the NYS Stormwater Management Design Manual.”

Comment GG/PSMR-10: The SDEIS Appendix D report should also be expanded to include a discussion on the following topics that are typically part of a Stormwater Pollution Prevention Plan:

- a. The stormwater conveyance system, which typically consists of pipes and swales.
- b. The measures to be utilized onsite during construction to control soil erosion and the transport of sediment offsite by stormwater flows.
- c. The provisions for the control of trash that is incidental to the construction on this site.
- d. The means and methods for controlling construction debris resulting from construction of the infrastructure and structures (both residential units and the 50,000 SF commercial development) proposed for this project site.

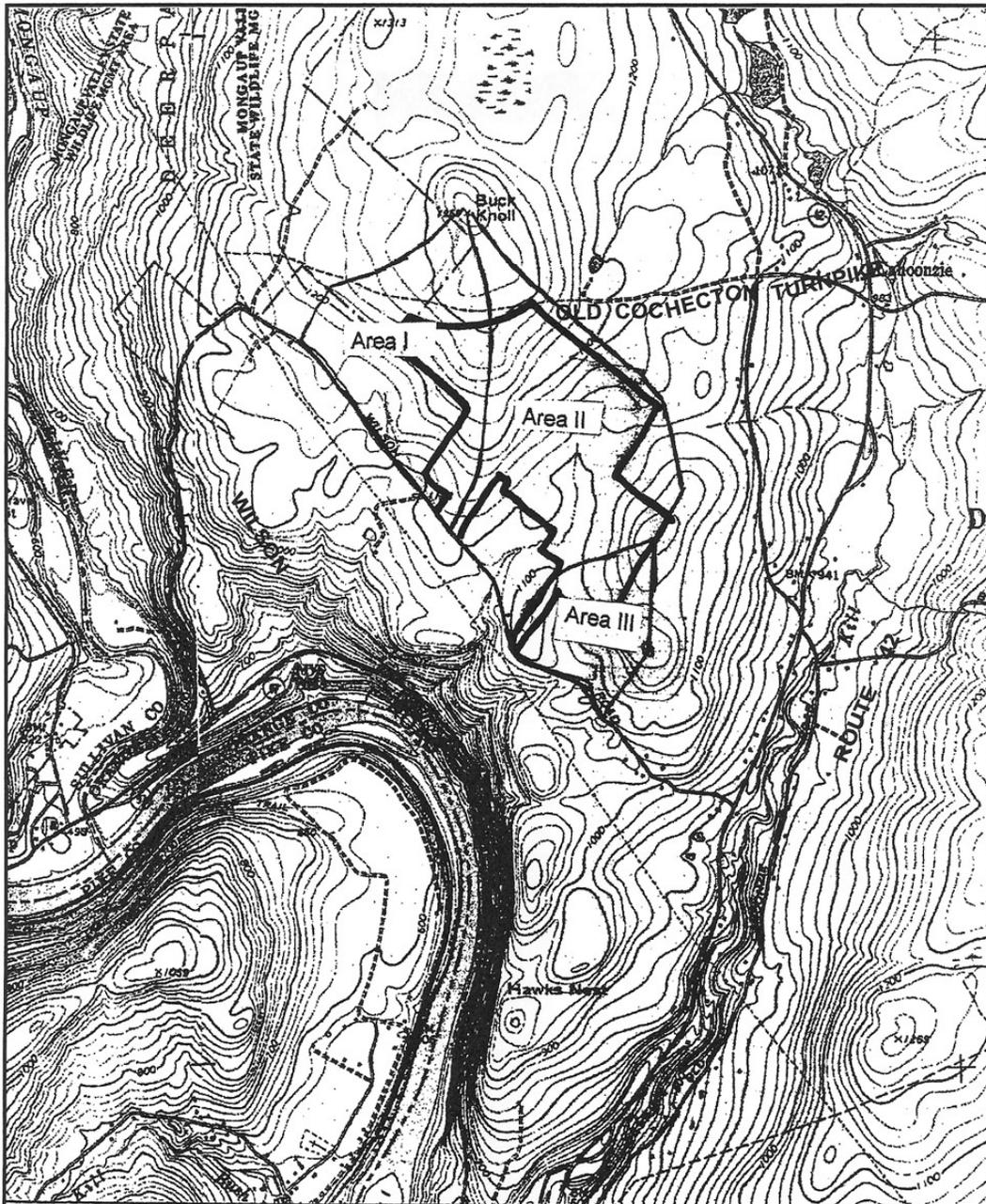
The above are all topics that must be addressed under the latest NYSDEC Regulations for the SPDES General Permit GP-02 -01.

These subjects are discussed in the SDEIS at Section IV.J.2.c (page IV-75) and the Section V subsection titled Mitigating Measures During Construction. They will be required to insure compliance with all governmental regulations.

Comment GG/PSMR-11: A title, map scale and north arrow should be included on the first map in Appendix A of SDEIS Appendix 4 and a more readable version of the soils map should be provided for the second map.

The two referenced maps are replaced by the maps on the following two pages.

Comment GG/PSMR-12: Requests discussion of basis for calculations included in SDEIS Appendix D report.



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**On-Site and Off-Site Areas in
Drainage Areas I, II, and III**

DEERPARK VILLAGE

Town of Deer Park - Orange County, New York

MAP SOURCE: 2001, Maptech, Inc.

The calculations for the post development site plan were based on the Comprehensive Development Plan which, in site plan terms, is a conceptual plan at this stage. Accordingly, they provide an order of magnitude estimate of the drainage impact and the approximate sizes of the mitigation basins. They are sufficiently accurate for assuring that, when a detailed site plan is prepared in the next stage, and detailed dimensions are developed, the storm drainage impacts can be mitigated so that there will be no adverse off-site impacts during peak period design storms. In any event, the Stormwater Protection Plan (SWPP) to be prepared for detailed site plan approvals at each stage, will be accompanied by a SEQRA review which will afford the public the opportunity to review the detailed calculations that are required for the SWPP. The newest NYSDEC regulations will be utilized in the development of the SWPPP, including low impact development and best practice methods.

Comment GG/PSMR-13: *Questions the conceptual nature of the plan that is the basis of the design analysis included in SDEIS Appendix D.*

See response to previous Comment GG/PSMR-7.

Comment GG/PSMR-14: *Question the basis for the evaluation of the capacity of existing box culvert described in the Appendix F section of SDEIS Appendix D.*

The referenced Appendix F document of SDEIS Appendix D, titled “Off-Site Stormwater Analysis (Route 97 Culvert)”, has been revised and is included in Appendix 14 of this FEIS. The revised Route 97 culvert study is dated 12/29/08. The study notes that the culvert must be replaced and that 90% of the flow is from the subject site. The developer has agreed to pay 90% of the replacement cost. The Planning Board’s review consultant has recommended that the developer be required to pay 100% of the cost.

The revised study concludes that under existing conditions the existing culvert, which measures approximately 3.33’ (H) x 4.0’ (W), is too small to accommodate the 100 year storm event. For this storm, the culvert should be replaced by a new box culvert measuring 4’ x 10’. This size culvert is required to meet existing runoff from a 100 year storm prior to any development occurring on the Deerpark Village site. The Deerpark Village development

stormwater management plan will result in no increase in pre-development flow through the Route 97 culvert.

The applicant, however, has agreed to pay for a proportionate share of the cost to construct a new Route 97 culvert, based on the proportion of project site runoff carried by the culvert, and has estimated that proportion to be approximately 90% based on preliminary engineering analyses documented in the 12/29/08 Route 97 culvert study in FEIS Appendix 14.

Site Plan Drawings

Comment GG/SPD-1: Notes that SDEIS drawing titled “Land Use Plan, Circulation and Open Space” does not show the proposed stormwater detention basins and open swales, and that some of the pedestrian trails appear to be improperly located in relation to the stormwater management elements.

The map titled “Land Use Plan, Circulation and Open Space” has been revised. It now also shows the locations of the proposed stormwater detention ponds and open grass swales as well as the location of pedestrian trails, development areas and open spaces. A copy of this revised map (dated June 2008) is included in FEIS Section I (page I-51), in the sub-section titled “Revised Plan Drawings”.

Comment GG/SPD-2: Notes that portions of drainage ponds in Drainage Area III fall within portions of the wetland buffer.

See response to previous Comment GG-PSMR-8.

Comment GG/SPD-3: Notes that a portion of the commercial area is at a lower elevation than the nearest stormwater detention pond and questions how stormwater will be managed for this portion of the commercial area.

Most of the commercial site (particularly the roofs of buildings) is above the elevation of the detention area. For the small portion of paved area that may be below the elevation of the detention pond, subsurface disposal will be utilized.

Comment GG/SPD-4: The staging plan included as Sheet 7 of the Comprehensive Development Plan submitted in conjunction with the SDEIS appears to be inconsistent with the drainage ponds included in the stormwater management plan.

See response to previous Comment GG/PSMR-2.

Comment GG/SPD-5: While all plans currently include a graphic scale, it was noted that the scales of the drawings provided were not standard engineering scales. In order to make it easier to work with these drawings, when the drawings are resubmitted, they should all be plotted to a standard engineering scale (and again include a graphic scale as well).

All drawings to be submitted for site plan approval and other permit approvals will utilize standard engineering scales.

Water

Comment GG/W-1: A statement should be provided indicating the standards (regulatory agencies and publications) that the system will be designed to meet.

The water system will be required to meet all applicable federal, state, County and Town regulations, including AWWA, Ten State Standards, New York State Health Department, and Orange County Health Department.

Comment GG/W-2: The layout of the water distribution system should include a second water line to connect the south section of the project site to create a distribution loop in case of emergency.

This suggestion will be considered in designs for site plan approval. It is prudent and often required by the review agencies to create a distribution loop when possible. This assists in operation of the system and fire flows.

Comment GG/W-3: A discussion should be provided clearly indicating the phasing of the construction of the various components of the water supply system (source capacity, distribution system and storage facilities) in relationship to the phasing of construction of other improvements.

The Staging Plan included in the Deerpark Village Comprehensive Development Plan has been revised to indicate the relationship between the construction of water system elements

and other improvements. A copy of the revised Staging Plan (dated July 2008) is included in this FEIS in Section I.E, (see Page I-50).

Comment GG/W-4: A discussion should be provided regarding ownership and operation of the water system.

See response to comment GG/W-14, item d. Basically it would include a Transportation Corporation (per NY State law) by the homeowners association or condominium organization. No costs to be borne by the Town.

Comment GG/W-5: A discussion should be provided regarding costs, management, and manpower requirements.

This is information that will be provided, if required by regulatory agencies reviewing applications, for approval of the proposed system.

Comment/GG/W-6: Requests information regarding the number of days before the well pumping tests were conducted that data was obtained from the off-site wells, and how long after the pumping tests were conducted that the off-site wells continued to be monitored.

This information is provided in Figures 17 through 21 of SDEIS Appendix B (see pages 16, 17 and 18). The figures indicate that all off-site wells were monitored continuously beginning almost 3 days prior to the start of the on-site pumping tests and ending not less than one day after completion of the on-site pumping tests (4 days in the case of one of the off-site monitored wells).

Comment GG/W-7: Notes that

- *OCDOH standards were not used to estimate project water demand. Water demand data should be presented in tabular format and fire flow requirements should be discussed with reference to the criteria of the Insurance Services Organization (ISO).*
- *Project wells were pumped at a tested yield of 395 gpm, but their production yield was estimated at the higher rate of 456.5 gpm to 489.5 gpm based on the hydrologist's evaluation of their capacity. Since the wells were not pumped at the higher rate, their capacity should be based on the lower rate of 395 gpm at which they were tested.*

The SDEIS notes (at page IV-52) that water demand for the residential units is based on 10NYCRR Part 75A of New York State Sanitary Code and per New York State Department of Health, water demand is estimated at 110 gpd per bedroom. The SDEIS also indicates that the water demand for the commercial development is estimated at 0.1 gpd per square foot of floor area. The figure of 0.1 gpd/sf is often utilized and generally accepted in the engineering profession for large commercial/office/industrial buildings, where the specific tenants are not known.

Water demand is presented in tabular format on page IV-52 of the SDEIS.

A discussion of the project fire flow provisions in relation to ISO criteria is included in FEIS Section II.A, in the sub-section titled “Water Supply System”.

With respect to questions regarding the adequacy of project wells to meet the demand of project development, see the response to the 8/2/07 letter from the Orange County Department of Health in this FEIS Section II.B and Appendix 13 Document BB which states “We would recommend a total water demand of at least 205 gpm”. This assumption would not cause any adverse impacts. The 900 unit alternative would reduce demand by about 40%.

***Comment GG/W-8:** In the section concerning “Homeowner Monitoring Results”, impacts are noted. Therefore, a statement clearly confirming all wells adversely impacted to any degree should be provided. Further, the statement that its “function is not likely to be disrupted” for the drawdown of the well monitored at 124 Wilson Road should be clarified. The drawdown of 35 feet will have an affect on pumps in the area, even if the problem may not present itself for several years. As the project phases are completed, the groundwater withdrawals will increase, the off-site impacts may similarly increase.*

The impact on homeowner wells is documented in SDEIS Appendix B.

A discussion of the private well drawdown impacts is included in FEIS Section II.A “Responses to Comments of the Public”, in the sub-section titled “Water Supply System”.

The Planning Board will re-evaluate water usage and drawdown information at each stage and any approval for additional development would be subject to the approval of the Orange County Department of Health with respect to the adequacy of the water supply system.

Comment GG/W-9: *The text should also estimate to whatever extent possible, the specific on-site wells most likely to be creating the off-site impacts shown. Ultimately the applicant should commit to “no adverse impacts” on existing off-site wells in the area.*

Examination of Figures 17 through 21 in SDEIS Appendix B indicates: the Sardini and Santini wells do not appear to have exhibited significant drawdown impacts during the project well pumping tests; the Wunschuh well appears to have experienced approximately the same drawdown during the pumping tests for each of the two groups of project wells; and the Acton and Werner wells appear to have experienced a larger drawdown during the pumping tests for the south group of project wells (project wells 1,3,4 and 5).

Also see FEIS Section II.A (“Response to Comments of the Public”), sub-section titled “Water Supply System” (page II-13) for additional discussion regarding drawdown impacts at Wunschuh well.

The SDEIS at page IV-57 make the following statement regarding the mitigation to be provided in the event that tests show that the operation of project wells will cause the failure of an existing off-site well:

“If such testing indicates the project water system will cause the failure of an off-site well, the project will formulate and implement, at its own cost, an appropriate remedy to make the affected property owner whole by assuring the availability of an adequate water supply.”

The alternate reducing the density to 900 units would reduce drawdown demand from the wells proposed, and thus reduce the possibility of adverse impacts. At each stage well drawdown and impacts from previous development will be presented to the Planning Board.

Additionally, as noted in FEIS Section I.F.8 (in the sub-section titled “Mitigation Measures” at page I-58), “in some instances the remedy may call for the connection of the project water system to the affected off-site property, and in the event the project water supply is found to have an unpleasant chlorine after-taste, a charcoal filter will be installed at each of the properties where this problem may be experienced.”

Comment GG/W-10: *The applicant should confirm the specific water treatment requirements for each well, based on the testing results.*

The SDEIS, at page III-55, states:

“Based on the water quality testing completed by the project hydrogeologist (see Appendix B) it is anticipated that the only chemical addition which will be required for the community water system will be chlorine to provide disinfection. Each well will be equipped with a well house which will house pump controls, well monitoring equipment, and chlorination equipment.”

Comment GG/W-11: *In the “Distribution System” discussion, it is indicated that a hydropneumatic system will serve approximately 375 residential units at the higher elevations, however, 10-State Standards specifies that systems serving more than 150 living units should have ground or elevated storage tanks. Therefore, the applicant should address this issue, and revise the water system design as warranted.*

As noted in the SDEIS at page IV-55 and in SDEIS Figure IV-25 (following page IV-56), the high pressure zone will have its own 50,000 gallon storage tank to meet the storage requirements of the high pressure zone, and the elevation of this storage tank will be 75 feet higher than the 400,000 gallon storage tank serving the remainder of the project.

Comment GG/W-12: *Also in this discussion, an explanation should be provided regarding why the 50,000 gallon storage tank will be provided with the hydropneumatic system, rather than having the 400,000 gallon storage tank with a hydropneumatic system thereby eliminating the need for the 50,000 gallon tank. Further, if a hydropneumatic system is feasible, then a discussion regarding an emergency power source should be provided. Ultimately, a discussion as to how the systems will operate, approximate elevations serviced by each, preliminary overflow elevations for each storage tank and how this distribution storage will be phased, should be included.*

The high pressure zone will have its own separate system of high pressure water mains to provide adequate water pressure to all users in the area containing homes at higher ground elevations. To provide the higher pressure, as well as the needed water storage to serve this area, a 50,000 gallon water storage tank has been proposed as an integral part of the high pressure zone, and this tank will be served by a booster pump station which will lift water to the high pressure zone.

The booster pump station will include a standby power source.

The Orange County Health Department includes fire flow projections with its requirements. The Planning Board will insure these are met at every site plan review stage.

Details regarding various other elements of the low and high pressure zones serving the project (elevations serviced, overflow elevation for each storage tank and the phasing of each system) will be included as part of the site plan applications for each development stage. General phasing concepts are shown on the revised Staging Plan (dated July 2008). A copy of the revised staging plan is included at page I-52 of this FEIS.

Comment GG/W-13: *For consistency, it should be confirmed that approval for a “community water system” will be required from the OCDOH and NYSDOH.*

The applicant acknowledges that approval for a “community water system” will be required from OCDOH and NYSDOH.

Comment GG/W-14: *In the discussion of “Water Distribution”, the following should be confirmed:*

- a. The anticipated design basis of water treatment be clarified (i.e., water quality testing).*
- b. A more detailed phasing/staging of the residential, commercial, recreation development should be provided that is coordinated with the development of all proposed infrastructure improvements and demonstrates the reliability of the infrastructure improvements which could then also be used to establish when future off-site well monitoring would be conducted.*
- c. In accordance with state standards dedicated standby power is required so that water may be treated and/or pumped to the distribution system during power outages to meet*

the average day demand. Therefore, this section should be revised to include a discussion of standby power or some other alternative

- d. Like any community utility, its success is only possible if it is properly operated, managed, and financed. In the past where ownership of similar utilities within other municipalities that have been retained in a “transportation corporation” they have often not been properly administered. Therefore, we suggest that this section include an expanded discussion related to the ownership of the system and its operation and management including the required qualifications of those entities that would be selected to operate and manage the system if ownership is retained by a transportation corporation, in order that it not become a burden to the Town.*

The basis for the proposed water treatment is discussed in subsection IV.H.2.f of the SDEIS, titled “Water Distribution”. See the response to Comment GG/W-10 above, for additional discussion regarding the proposed water treatment.

The Staging Plan has been revised to more clearly show the relationship between proposed infrastructure and proposed residential, commercial and recreational development. A copy of the revised Staging Plan (dated July 2008) is included in FEIS Section I at page I-52.

As noted in the “Mitigation Measures” sub-section of FEIS Section I.F.8 (page I-58), future monitoring is required to determine at what phase of development, if any, this could occur. Such monitoring will be conducted in accordance with the Well Monitoring Agreement and Program found in SDEIS Appendix C and discussed in SDEIS Section IV.H (see page IV-56).

The following new paragraph is added to the SDEIS at the end of Section IV.H.2.f, and preceding Section IV.H.2.g:

“All elements of the water distribution system (including wells, valves, mains, booster pump station, well pumps, etc.) will be designed in accordance with all applicable governmental requirements, and will include standby power sources for all pumps.

The use of “transportation corporations” to own, operate and manage water systems is a procedure which is widespread and of long duration in the State of New York. These corporations are regulated and their water systems are regulated and monitored by a number of State and County agencies.

Further, the condominium agreement and/or the homeownership organization agreement will include information on the “transportation corporation” to be established, and its financing implications to residents, and will be the subject of review by the New York State Attorney General.

In any event, there is no basis for assuming that the Town would under any circumstance become involuntarily responsible for any costs relating to the operation of this system.

***Comment GG/W-15:** The “Conclusions” presented in the text requires revision, based upon the comments offered above. This should be reviewed and corrected, as necessary.*

To the extent applicable, conclusory responses to these comments are deemed to be incorporated in the EIS. Also, these responses include references to the 900 unit alternative which has been introduced in this FEIS.

***Comment GG/W-16:** Concerning “Mitigation”, in the interest of the Town it should be confirmed that the first and foremost mitigation measure shall be the posting of a cash bond prior to final approval by the developer, in an amount to be set by the Planning Board, to ensure that such homeowner complaints are properly investigated and corrected, and that such bond will be retained by the Town for no less than five (5) years after the completion of build-out of the proposed development.*

There is no legal basis or precedent for the requirement of such a bond.

The responsibilities of the developer with respect to “homeowner complaints” will be spelled out in sales agreements between the developer and the buyer. The Town is not a party to any such agreements.

However, with respect to infrastructure improvements the Town will require a bond in accordance with the provision of the Zoning Code for the PRRC District.

Comment GG/W-17: *Concerning “Mitigation”, although future monitoring of off-site wells will be conducted at as to yet to be agreed to phases of development, the proposed mitigation plan should indicate who (e.g., Town Building Department) is to receive complaints from the owners of off-site wells who feel that their wells have been adversely impacted during the intervening period between scheduled monitoring events who would be immediately referred to the developer for resolution. Thereafter, the following general procedures should be followed:*

- i. The developer would retain a hydrologist to investigate the complaint.*
- ii. This investigation would include a review of available water level data from the Deerpark Village operating wells and off-site wells monitored, together with data obtained during their investigation of the complainant’s well.*
- iii. The applicant would submit a description of the complaint, recommendations, and hydrologist data to the Planning Board for review.*
- iv. If the individual well was not being affected by the Deerpark Village’s water supply wells, as determined by the Planning Board upon recommendation by their consulting hydrologist, the homeowner would be referred to a competent well or pump contractor for remediation at the homeowner’s cost.*
- v. If the individual well was determined to be affected by the Deerpark Village’s water supply wells, the following possible remedies would be pursued and paid for by the developer.*
 - (1) Lowering the homeowner’s pump, if possible*
 - (2) Deepening the well*
 - (3) Redeveloping the well*
 - (4) Drilling a new well, or*
 - (5) Connecting the resident to Deerpark Village’s public water supply system; and, if this alternative is chosen by the developer, the homeowner would be given two years of free water service, and would thereafter pay \$50 per year, adjusted by the average annual Consumer Price Index for the New York –Northern New Jersey Area. The connection would essentially eliminate the homeowner’s costs related to the maintenance of the private wells and pumps on the property in exchange for metered service.*
- vi. The homeowner would be notified of the Planning Board’s findings*

We suggest that a statement be provided indicating that the future monitoring will be continued for five (5) years following full build-out of the proposed project.

See preceding response to comment GG/W-14, Page II-100.

Well Testing Report (SDEIS Appendix B)

Comment GG/WTR-1: We consider the information provided to be deficient. More accurate and updated information should be provided, based upon the following:

- a. The wells were not pumped at the volume required to meet demand.*
- b. They stabilized at a lower rate, although the hydrologist suggested potential for higher rates. This higher yield was estimated by adding 10% to 20% to the test yields for several of the wells. The sum of these higher “potential” yields still does not meet the minimum calculated demand (with the best well out of service).*
- c. Some of the higher yields they claim are possible are higher than the drillers estimated yields, as presented earlier in this report, without any substantiation.*
- d. The adequacy of the wells drilled has not been proven. Another consequence of this is that the severe impact to the private well will likely be even worse when the wells are pumped at the higher required rate.*
- e. Another issue concerns water quality. It is simply stated that it is “acceptable”; however, no summary table is provided. The lab reports indicate numerous “hits” of a VOC. Radon was also reported. A summary of water quality results should be presented, and the applicant should more clearly address required treatment for each well.*

The studies undertaken by a qualified professional hydrogeologist (see SDEIS Section IV.H, at page IV-44, and SDEIS Appendix B) establish that it is reasonable to assume that there will be sufficient water resources to serve the development proposed in the Comprehensive Development Plan.

But, as an additional safeguard, and as mitigation, the applicant has agreed that, for later stages of development, additional information, and pumping tests if necessary, will be provided with respect to water availability for the subsequent stage. If tests were then to establish that there are not sufficient water resources for any subsequent stage, then it will not be possible to develop that stage.

Also, see Table I-7 in FEIS Section I (at page I-67), sub-section titled “Water Supply Quality”, for summary table of all tested water quality parameters, including radon (for all seven production wells).

Well Monitoring Agreement and Program (SDEIS Appendix C)

Comment GG/WMAP-1: The statement that off-site wells will be monitored between May and October warrants further discussion.

This period includes the summer months and represents the period of least groundwater recharge.

Sanitary Sewers

Comment GG/SS-1: Requests information regarding: regulatory agencies with jurisdiction; discharge limits for the various discharge points; the phasing of the construction of the sewage lines and sewage treatment plant; emergency power source; ownership and operation; costs, management and operation; sewage pumping stations; sludge handling and disposal; commitment to provide landscaping at pumping stations and sewage treatment plant; coordination of infrastructure element with staging of the development; and, standby power sources for sewage pumping stations and the STP should be described.

It is noted that the proposed sewage treatment plant will have only one discharge point to John Woods Brook.

The applicant is committed to providing suitable landscaping at pump stations and at the sewage treatment plant, and the details relating to this landscaping will be addressed in the Site Plan Applications that will be prepared for review and approval prior to the development of each phase of the project.

See the previous response to Comment GG/PSMR-2 (Page II-86) regarding the coordination of infrastructure element with the staging of residential and commercial development.

The other concerns expressed in Comment GG/SS-1 (above) are addressed in FEIS Section I.H, Page I-75 (“Sewage Treatment Plant”), FEIS Section II.A (see sub-section titled “Sewage Treatment Plant and Sanitary Sewage System”), and in FEIS Appendix 5 (“Description of Alternating Aerobic/Anaerobic Fixed Film Media Trickling Filter System Sewage Treatment Plant”).

Electric

Comment GG/E-1: The 1995 letter from Orange and Rockland Utilities should be updated.

An updated letter is included at FEIS Appendix 10 from Orange and Rockland indicating that they will serve the project in accordance with Orange and Rockland, Inc. charter agreement for New York State.

Project Amenities/Layout Mapping

Comment GG/PALM-1: Requests that SDEIS include indication that details regarding the proposed development will be included in the Site Plan Application material to be submitted in the future in connection with each development phase.

This information is included in the SDEIS at pages I-2 through I-4 indicating compliance with Town requirements at each stage.

Grading/Layout/Topography and Slopes

Comment GLTS-1: Information should be provided regarding: the extent to which the site contains steep slopes; the extent to which these slopes will be disturbed by the proposed development; and the manner in which disturbance of steep slopes will be mitigated.

In the existing condition:

- Slopes of 15% to 25% account for 22.1 acres (91% of the site's 243 acres)
- Slopes over 25% account for 2.1 acres (0.9% of the site's 243 acres)

In the proposed developed condition for the 1,581 unit alternative plan initially proposed:

- 12.7 acres of the 22.1 acres of 15% to 25% slope will not be disturbed and 9.4 acres will be disturbed.
- 1.2 acres of the 2.1 acres of over 25% slope will not be disturbed and 0.9 acres will be disturbed.

In the proposed developed condition for the 900 unit alternative plan described in Section I.J of this FEIS:

- 18.5 acres of the 22.1 acres of 15% to 25% slope would not be disturbed and 3.6 acres would be disturbed.

- 1.7 acres of the 2.1 of over 25% slope would not be disturbed and 0.4 acres would be disturbed.

The project layout has been carefully designed so as to minimize impacts to areas of steep slope. In those instances where such impacts could not be avoided, detailed proposals to mitigate disturbances to areas of steep slope will be presented in the Site Plan Application documents that will be submitted for each phase of development.

***Comment GG/GLTS-2:** The applicant should indicate when more detailed topographic data will be presented and this data should show the proposed layout and the proposed grading.*

More detailed topographic data will be presented as part of the Site Plan Application drawings that will be submitted for each individual phase of development. These drawings will show the proposed building layout and proposed grading.

Community Services and Facilities

***Comment GG/CSF-1:** While the SDEIS narrative describes various recreational facilities that will be provided, the plans submitted show the location of the open space areas and the trails but do not identify the sizes and locations of all of the other recreation facilities.*

The locations and sizes of individual recreation facilities (swimming pools, tennis courts, clubhouse, etc.) will be included in the Site Plan Application drawings that will be submitted for each individual development phase.

Visual Impacts

***Comment GG/VI-1:** Visual impact mitigation “objectives” should be explained and the SDEIS should identify the visual impact design analysis submissions to be included in the site plan/subdivision submission.*

The objective of the visual impact mitigation measures is the reduction of project visibility from off-site areas. The means by which this objective will be achieved are discussed in the SDEIS at Section I.D. (“Mitigation of Adverse Impacts”) under the headings of “visual impact” (see SDEIS page I-12) and “change in land use” (see SDEIS page I-9), and again in SDEIS Section V under these same headings (see SDEIS pages V-1 and 3).

In the discussion of visual impacts in SDEIS Section V, the narrative specifies the visual impact design analysis submissions that are to be included as part of the site plan application for each phase.

Comment GG/VI-2: *The term “small variations during differing seasons”, referring to changes in possible visual impacts should be explained.*

This term refers to the loss of tree leaves during winter months which can result in changes in the visibility of some areas.

Comment GG/VI-3: *A Preservation Plan or Report should be prepared for the site which identifies setback allowances and the intent to preserve existing stone walls, foundations, or other significant pre-existing infrastructure or conditions on the site that should be considered in the layout and design of the project.*

No known important historic, architectural or archeological resources are known to be on the site (See FEIS Appendix 2 at the bottom of page 8).

However, as a site plan for each stage is developed, a detailed site review will be undertaken by the project’s architect or landscape architect, and any existing elements that are found which are deemed to be worthy of preservation will be incorporated in the site design plan to the maximum extent feasible. Also, 50’ grid for archeological shovel test examination will be made for areas to be disturbed within each stage.

Traffic

Comment GG/T-1: *Questions are raised regarding the material presented in the SDEIS relating to: trip generation; trip distribution patterns; safety issues at the Wilson Road intersections with Route 42 and Route 97; AASHTO criteria; the basis for the annual 1% rate of growth of background traffic; and absence of traffic generated by specific development.*

The annual 1% rate of growth of background traffic is a generally accepted figure and has been cited in many comparable traffic analyses. Traffic volumes at the Wilson Road intersections with Route 42 and Route 97 were counted on Tuesday, March 11, 2008 from 7:00 am to 9:00 am, and from 3:30 pm to 6:30 pm. The peak hour 2008 counts along with

the April 2004 peak hour counts are shown and discussed in FEIS Section I.C (page I-13) in the sub-section titled “Supplementary Traffic Analyses”. Considering the assumed 1% per year growth in background traffic, the 2004 counts should in theory be increased by four percent to arrive at the figures for 2008. This, however, would result in a smaller increase in traffic on Route 97 and a larger decrease in traffic on Route 42 and on Wilson Road than the figures recorded in the 2008 counts, and thus indicates that there has not been a significant increase in any of the traffic volumes since 2004. In fact, substituting the 2008 counts for the 2004 counts would result in a slight decrease in the volume/capacity ratios and average vehicle delay times at both of these intersections (Wilson Road/Route 42 and Wilson Road/Route 97), although the Levels of Service probably would not change. Thus, it can be concluded that the 1% factor has been a conservative assumption since it appears that it may overstate actual background traffic growth.

With regard to the comment’s statement that specific developments are not included in the SDEIS estimate of No-Build traffic volumes, the inclusion of a specific development in the No-Build traffic volumes is cited at page IV-26 of the SDEIS.

All of the other issues cited in this comment are addressed in the “Supplementary Traffic Analyses” found in Section I.C of this FEIS (page I-13).

***Comment GG/T-2:** The proposed emergency connection to Old Cochection Turnpike is proposed in an area where the roadway does not presently exist. The applicant should clarify the extent of improvements required to provide the intended emergency access. Further, control measures for emergency access to Old Cochection Turnpike should be discussed, and whether from a public safety perspective (given the project’s large resident population), a “permanent” connection may be warranted.*

The project’s extensive traffic studies have indicated that a “permanent” connection is not warranted.

The right-of-way will be improved to such standards as will be deemed applicable by the Town Engineer.

Access will be controlled by an emergency gate for which all emergency services will have an electronic access device.

In the event that approval cannot be obtained for the crossing of a wetland by one of the proposed emergency roads, an alternate emergency road shall be provided, or the emergency road connection to Old Cochection Turnpike shall be implemented.

Comment GG/T-3: The size of the project warrants multiple points of ingress/egress. Currently, each side of the project will be limited to a single point of connection to Wilson Road, which access could be subject to interruption by various natural or man-made events. The means to either improve access, or otherwise minimize the potential that such access could be temporarily interrupted, should be discussed.

The comment does not properly describe the circulation system. There are two access points to Wilson Road. They are internally inter-connected by an emergency road. There is a third emergency access point to Old Cochection Turnpike which will be improved.

Comment GG/T-4: Further, the two areas of the site are connected by a proposed wetland crossing near the project entrances, and which traverses the middle of the large on-site wetlands system. The serviceability of this could likewise be affected. Further, this roadway's location on the site still maintains the great majority of the residents beyond this point. The applicant should consider whether a different wetland crossing should be considered, to connect the two areas of development, possibly towards the rear of the tract where the wetlands could be skirted in order to minimize possible wetlands impacts. The surface treatment for whatever wetland crossing is proposed should also be confirmed.

The wetland crossing point selected provided for the most minimum disturbance of the wetland (approximately 0.23 acres), and to still provide adequate circulation in the event of an emergency. The surface treatment to be selected will be based on the requirements established by the Town Engineer.

**2. ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
(See Document AA in Appendix 13 at page 1)**

Comments noted.

3. ORANGE COUNTY DEPARTMENT OF HEALTH
(See Document BB in Appendix 13 at page 2)

The SDEIS indicated that when the project is fully developed, it will generate a total water demand of 189.1 gpm, noting that the project production wells are capable of supplying between 183.6 to 196 gpm. The alternate 900 unit plan would reduce the demand to 113.5 gpm, well below the production capacity of the wells.

The following chart compares the estimated daily domestic water consumption for the 1,518 unit project initially proposed and the 900 unit alternative described in Section I.J of this FEIS. The alternative plan would result in a daily demand that is approximately 60% of the demand generated by the 1,581 unit project.

SDEIS Plan (Gallons per Day)	Alternative (Gallons per Day / % of Original)
272,190 gpd	163,400 gpd / 60%

The Orange County Department of Health notes that they would recommend the use of a figure of 205 gpm as the project's total water demand at full development. The alternate 900 unit plan would generate demand of 113.5 gpm, thus well below the Orange County Department of Health recommendations.

As noted in the SDEIS, "the project will be built in stages, at a build out rate of approximately 150 units per year, and each stage will be subject to its own site plan and/or subdivision review and approval. The approval of each stage will be dependent on the project's ability to validate the adequacy of the water system that will service the subsequent stage. After the first few years, evaluation of the water system's adequacy will be based on records of actual water usage by earlier stage residents as well as the long term performance records of the operating wells. If, as the project approaches its later stages, it is determined that the actual long-term operating characteristics of the seven production wells indicate the need to add new operating wells to support development of these later stages, such

development shall be contingent on the project's ability to add needed additional water resources.”

**4. ORANGE COUNTY DEPARTMENT OF PLANNING
(See Documents EE-1 and EE-2 in Appendix 13 at pages 8 to 14)**

The County Planning Department submitted a comment letter on September 26, 2007 (See Appendix 13 – Document EE-1 at pages 8 to 12). After receipt of further information from the applicant, the County Planning Department, on February 5, 2009, submitted an amended letter (See Appendix 13 – Document EE-2 at pages 13 and 14). It is noted that the applicant's attorney has advised the County Planning Department that this project does not conform to the referral requirements of Section 239-M of New York State law. The County Planning letter notes that its comments are advisory. Nevertheless, with respect to the advisory comments in the February 5, 2009 letter:

1. Comment noted regarding density.
2. With respect to emergency service requirements, this FEIS includes a letter from the ambulance corps indicating its ability to service the project and the mitigation section describes the emergency services to be provided for the developments own on-site security personnel.
3. The DEIS and the FEIS fully describe the off-site well monitoring that has taken place, and the monitoring to take place as the project is constructed.
4. The DEIS and FEIS describe the full range of facilities that will be developed on-site and which will mitigate any impacts on Town senior citizen services.

The traffic analysis in the DEIS was extensively reviewed by the Town Planning Board's professional consultants. This FEIS provides responses to the review consultant comments and includes supplementary analyses.

5. NEW YORK STATE DEPARTMENT OF HEALTH
(See Document FF in Appendix 13 at pages 15 and 16)

Each stage of development will require site plan approval. This would be accompanied by a SEQRA review of the impacts of each stage's added water supply demands and would include: information as to the average water usage of households from previous development of prior stages; and, a projection of aquifer impacts for the subsequent stage. Thus, studies supplied in the SDEIS will be updated, and adjusted if needed, to reflect actual impacts.

As additional mitigation, the development will require all dwelling units to include low flow shower heads at the time of initial construction.

The alternative of spray irrigation disposal of treated waste water was examined and found not to be feasible because of the number of months that the ground may be frozen. This is further discussed in FEIS Section II.A.5 ("Response to Comments of the Public, Sewage Treatment Plant and Sanitary Sewage System"). Also, after the construction of 1,000 dwelling units, the feasibility of subsurface disposal of sanitary liquid waste will be investigated. This is discussed in detail at the end of the Section I.H, on pages I-78 and I-79.

The Comprehensive Development Plan includes a detailed proposal for monitoring impacts to current users of the aquifer and a mitigation plan to address any adverse impacts. These are fully described in SDEIS Section IV.H.2 and IV.H.3, SDEIS Appendix C and in FEIS Section I.F.8 ("Mitigation Measures" at page I-54).

6. DELAWARE RIVER BASIN COMMISSION
(See Document CC in Appendix 13 at pages 3 to 5)

The letter advises that this development must meet Special Protection Waters requirements which are described in the Commission's Water Quality Regulations.

It advises that DRBC approval will be required prior to construction for a non-Point Source Pollution Control Plan.

In general, prior to construction, the project is subject to review and approval by the DRBC pursuant to Section 3.8 of the Delaware River Basin Compact.

The applicant acknowledges that these requirements will need to be addressed and approvals obtained prior to the start of construction. The approvals involve sewage treatment and its effluent, groundwater withdrawal for water supply system and non-point source pollution control plan. These are detailed in Document CC in Appendix 13 at pages 3-5.

**7. DELAWARE RIVERKEEPER
(See Document DD in Appendix 13 at pages 6 and 7)**

Riverkeeper's concern about impacts to the water supply aquifer are addressed by a plan under which only 27% of the site in the case of the initially proposed 1,518 unit plan, or 19% for the 900 unit alternate plan described in FEIS Section I.J, will contain impervious surfaces. Further mitigation will be achieved by subsurface discharge of roof drains from homes, and use of eco-pavers, or similar surfaces for paving of parking areas.

Riverkeeper expresses a concern about the cost to neighboring property owner's who may elect to be connected to the project's water system because of the impact of project well drawdown on their wells, and as provided for in the mitigation proposal. The mitigation proposal will be implemented at no cost to the affected property owner, and any fees for usage would not exceed the estimated energy cost that the property owner previously experienced for the operation of the owner's well pumps and periodic maintenance and replacement of the pumps.

The emergency access road is a necessary element in order to assure the health, safety and welfare of the development's residents. The location selected provided for the most minimal disturbance, 0.23 acres, an amount which is below the limits within which a commonly and routinely issued US Army Corps of Engineers Nationwide Permit Number 14 is usually granted. Since no change in elevation nor disturbance of flow patterns will result, there will be no significant change in existing hydrology. The surface for the portion of roadway

traversing the wetland will be based on recommendations from the Corps of Engineers for a surface that has the least impact. If the NYSDEC takes jurisdiction of the wetland, the site plan must be re-evaluated.

The project plan does not require any waiver or variance from any applicable local, County, State or Federal environmental regulation.